1986

University of
North Carolina
at Chapel Hill
School of Medicine

medical alumni BULLETIN

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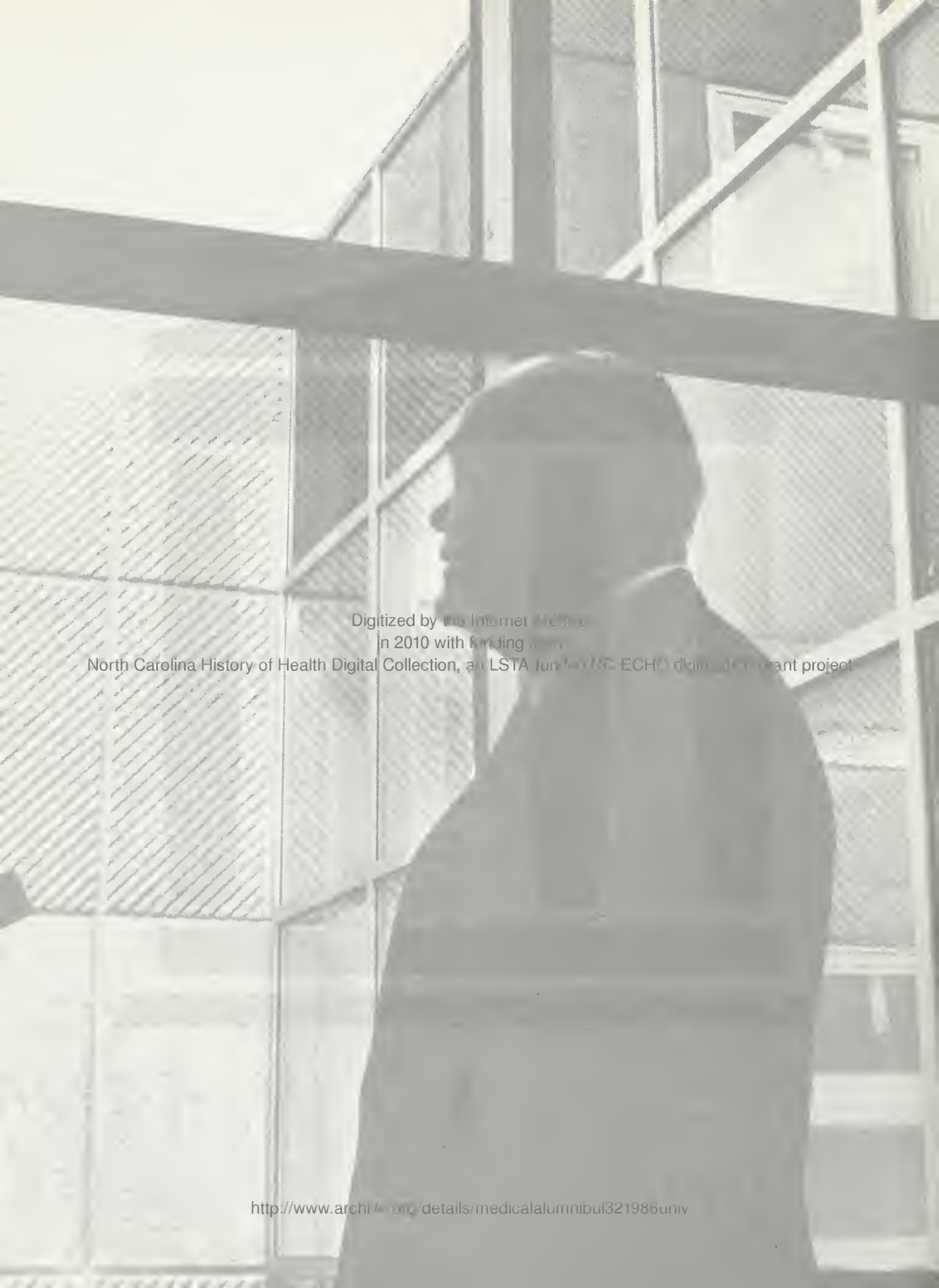
The First Norma Berryhill Distinguished Lecture



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medical alumni BULLETIN

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Behind the lines

It is my pleasure to resume authorship of this column long enough to introduce the new editor of the **Medical Alumni Bulletin.**

Sharon 'Sherry' Freeland will be the proprietor of this space in future editions. She joined the public affairs staff in August, succeeding longtime editor John W. Becton, who moved to the UNC-CH School of Nursing.

Sherry comes to the medical school from Blue Cross and Blue Shield of North Carolina, where she had served since 1979 as an editor and copywriter. Prior to that, she was a reporter for the **Durham Morning Herald.** Ms. Freeland is a 1974 graduate of North Carolina Central University. She is a member of the International Association of Business Communicators, and is active in community and church work in Hillsborough, her hometown.

She begins her editorship by compiling this edition, the contents of which I think you will find rewarding. I particularly commend your attention to the photo-essay about the first Norma Berryhill Lecture beginning on page 2.

—JWS

NORMA BERRYHILL

They came out of excitement and a commitment to excellence.

In early November, friends, family and alumni came to Gerrard Hall, in the heart of the University of North Carolina campus, to celebrate. They came out of excitement and a commitment to excellence.

It was the first Norma Berryhill Distinguished Lecture, a homecoming for some, a beginning for others.

The lectureship was designed by the School of Medicine to honor distinguished faculty, as well as to welcome new faculty members in an academic convocation.

The lectureship was named in honor of Mrs. Berryhill because of her devotion to the medical school and her many contributions to its quality and character. She served as the official "First Lady" during the years her late husband, Dr. Reece Berryhill, was Dean. In that role, she enriched the lives of countless numbers of students, faculty members and their families.

The lectureship is supported by the generosity of friends and the School of Medicine. Contributions are still being accepted.

Dr. John Borden Graham, Alumni Distinguished Professor of Pathology, was the first Norma Berryhill Distinguished Lecturer. His selection as the first lecturer was most fitting because of his close personal and professional relationship with Dean Reece Berryhill and members of the medical faculty.

At the convocation, Dr. Graham spoke on "The Evolution of a Program of Graduate Education and Research." He traced the meager beginnings of genetic studies in the medical school to the nationally acclaimed program it is today.

A member of the faculty since 1946, Dr. Graham has made major contributions as a scientist and a teacher. During the late 1960s and early 1970s, he was chairman of the Genetics Training Committee of the National Institute of Health through which he helped establish the pattern of training in genetics in the country's top universities.

Dr. Graham is Director of the Division of Research in Thrombosis and Hemostasis in the Department of Pathology, a coagulation research program which last year received a five-year renewal grant of nearly $2 million from the National Institute of Health.

A native of Goldsboro, Dr. Graham earned his Certificate of Medicine at UNC in 1940 before going on to Cornell to complete the requirements for his M.D. degree.

Dean Stuart Bondurant summed up Graham's selection as the first Norma Berryhill Distinguished Lecturer well: "...because of his profound and personal impact as a teacher and a colleague upon the lives and generations of students and faculty."

Alumni and Friends Gather For Norma Berryhill Lecture

Dr. Stuart Bondurant poses with Dr. John Graham and Norma Berryhill. After the first Norma Berryhill Distinguished Lecture, friends paid tribute to the pair at a reception.

ALUMNI GATHER FOR MEETINGS

"These meetings were an excellent idea. It is good to be aware of the current curriculm and to be able to return to Chapel Hill for continued education," Gottovi said.

Dr. Luther Kelly, Jr., '46, president of the Medical Alumni Association talks with Dr. Daniel Crocker, '70, at an alumni meeting.

Medical alumni and friends from across the state have had an opportunity to meet this fall with staff from the Medical Alumni Office and School of Medicine to discuss curriculum and medical school planning with alumni and community leaders.

Dr. Luther W. Kelly Jr., president of the Medical Alumni Association, is pleased with the response he had gotten from alumni.

"These meetings have been very productive. There has been a reaffirmation from alumni to have more interchange with the faculty, an active alumni return program and an improved patient refferal program."

Kelly made a presentation at each of the meetings, along with Dean Stuart Bondurant. Alumni were given an opportunity to ask questions and make comments on medical school programs and alumni involvement.

He is looking forward to more regional meetings as well as reinstating district meetings.

Dr. Dan Gottovi, who hosted the Wilmington meeting, commented on the success of the regional meetings and his regard for the continuing medical education program.

"These meetings were an excellent idea. It is good to be aware of the current curriculm and to be able to return to Chapel Hill for continued education," Gottovi said.

Kelly also informed alumni of efforts being made to establish a Medical Alumni Association Endowment Fund of "significant porportions."

"There has been strong sentiment among alumni in favor of an alumni endowment, Kelly said. We need the support of all alumni in carrying out this project."

Dr. Eugene Mayer talked on this subject to alumni and community leaders during the regional meetings held last fall.

FUTURE CHALLENGE

Educating the physicians of the 21st century presents a tremendous challenge, and the School of Medicine is seeking to meet that challenge through a detailed plan that has been developed over the past two years.

Physicians reading the *Medical Alumni Bulletin* 25 years from now will find themselves practicing in an environment vastly different from the present. Many will be working in organized settings of medical care, such as health maintenance organizations. They will be treating patients who already have used home diagnostic kits made possible by biotechnology. They will be counseling pregnant mothers on correcting abnormal genes in unborn children. They will be prescribing organ transplants or artificial organs for patients. And they will be doing all of this with the aid of a computer.

Educating the physicians of the 21st century presents a tremendous challenge, and the School of Medicine is seeking to meet that challenge through a detailed plan that has been developed over the past two years. More than 120 members of the medical school faculty and executives of the North Carolina Memorial Hospital worked on this plan, which is fully integrated with the long-range plans of the hospital and the Area Health Education Centers program.

The plan designates four general areas as medical school priorities: biotechnology, clinical program development, health promotion and disease prevention, and computer applications in medicine.

Biotechnology: Biotechnology will allow physicians to better understand many of our most complex and troublesome diseases. Physicians will be able to prevent many illnesses through new vaccines and through the replacement of a single abnormal gene in a defective chromosome in an unborn child. Powerful new diagnostic tests utilizing highly selective antibodies will permit serious diseases to be detected much earlier. And, for those diseases that elude prevention, we will be able to unleash new therapies through the manufacture of new drugs and the replacement of abnormal genes.

Clinical Program Development: We need to develop a new facility devoted to ambulatory care—a facility providing specialty consultation and referral on a statewide basis and offering efficient family medicine services on a local basis. In addition, in-patient facilities must be remodeled so we can capitalize on services made available through biotechnology and expand our organ transplantation program. The plan also calls for advances in emergency and rehabilitation services.

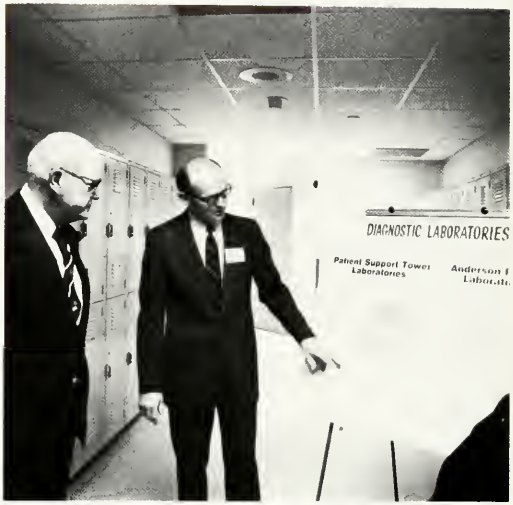
Health Promotion and Disease Prevention: Large-scale community studies based on the science of epidemiology are showing the importance of factors such as diet and exercise, and early findings in biotechnology hold promise for new vaccines and for correcting molecular abnormalities in human genes. The medical school will be moving ahead in health promotion and disease prevention on several fronts, including efforts to reduce the incidence of premature births and to reduce injuries at home, in the workplace and on the highways.

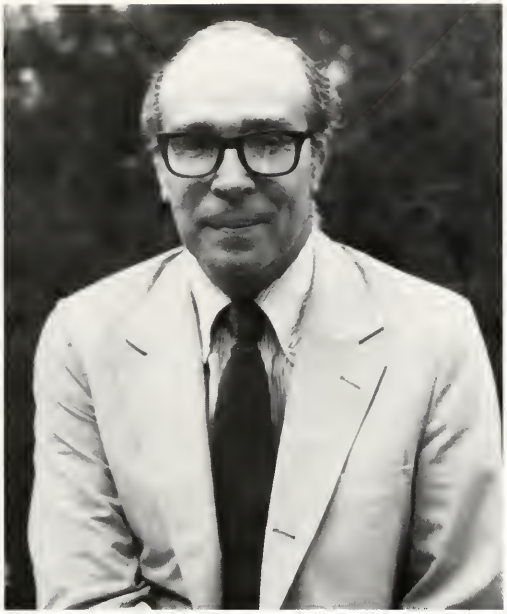
Computer Applications in Medicine: The computer is becoming an indispensable tool for the medical school and medicine in general. Computers allow us to take advantage of the wonders of biotechnology. Computers make possible increasingly sophisticated investigative studies. Computers link our medical school faculty to referring physicians and to the Area Health Education Centers. Our medical students must become proficient with the computer if they are to be effective practitioners in the next century.

The School of Medicine is blessed with an outstanding faculty and with modern physical facilities for teaching, laboratory and clinical programs. The long-range plan that has been developed for the school is aimed at keeping us in the forefront of medical education and ensuring that our graduates possess the tools to continue to meet the health care needs of our citizens.

Anderson Pavilion Dedicated

The Esley O. Anderson Jr. Pavilion, a critical care facility, was dedicated Dec. 7 at N.C. Memorial Hospital. Hospital and state officials, along with friends and community leaders, were on hand to dedicate the $18.6 million, six-story building.





Dean's page

The great changes in medical practice and hospital operation lead to reflections upon the role of hospitals in medical practice and medical education in the future. Certainly a great deal of late 20th century American medicine and medical education have been shaped by the nature of the hospital setting. Since the modern hospital has evolved principally to allow effective and efficient application of medical technologies, and since medical education has been largely oriented toward learning when and how to apply technologies, the hospital has become the predominant setting for medical education. Despite a decade or more of effort—sometimes quite substantial—to disperse medical education into ambulatory or community settings, we have not yet developed a non-hospital setting for medical education that is as effective as the hospital setting.

It seems increasingly clear, however, that in the future, even with specific financial support for educational programs, hospitals will become a less appropriate and effective setting for medical education. Many see this change principally as a result of financial pressures on hospitals which force them to become more efficient. I believe that, in addition, there are changes in the nature of the practice of medicine related to the development of new technologies, demographic changes in the population, and changes in the organization of the practice of medicine which would make it increasingly important to develop medical education outside of hospitals.

Many current and coming technologies can be efficiently applied outside of the hospitals. Offices and free-standing diagnostic or treatment facilities (surgi-centers, for example) seem likely to continue to grow. An aging population with chronic conditions and illness will more often seek to avoid hospitalization. Organized group practices will continue to compete with each other in part on the basis of the ability to apply technologies in the non-hospital setting.

If the foregoing speculations turn out to be correct, hospitals are likely to be used more exclusively for short-term, high-intensity diagnostic and therapeutic services with limited opportunity for teaching.

It seems that it is not too early to increase our efforts to design a strengthened system of extra-hospital medical education. It will not be easy to do this because ambulatory practice, whether in office or clinic, is subject to many of the same pressures which are influencing hospital practice. I hope that we can find ways to make it attractive and rewarding for many of our alumni in practice to participate in the expanded extra-hospital teaching programs which I expect that we, along with most other medical schools, will develop in the coming years.

84-85 Highlights

These highlights present a synopsis of some of the many important achievements of the faculty, students, and staff of the School of Medicine of the University of North Carolina at Chapel Hill during the academic year 1984-85. The achievements are broad-ranging and substantial. They include essential professional educational experiences of the highest quality for hundreds of medical students and thousands of physicians, nurses, dentists and other health care providers. The achievements include research programs of great power and diversity which in many areas are among the strongest in the nation and the world, and they include an array of public and patient care services to the people of North Carolina which are a key in assuring our people the best possible health care.

Stuart Bondurant, M.D.
Dean

Teaching programs

- The first year of the new curriculum has gone well. There were efforts to reduce the proportion of time devoted to lectures; selective seminars in biomedical sciences were introduced, as well as new plans for evaluation of students and academic assistance. The Transition Course, a two-week prelude to the clinical environment, was introduced successfully in 1983-84.
- Our medical graduates again fared well in the National Matching Program. Sixty-one percent of the Class of 1985 in the Matching Program were matched with their first choices. Seventy-eight percent received one of their first three choices and 97 percent are at university hospitals. Fifty-nine percent chose primary care residencies.
- Residents in Internal Medicine scored among the top three percent of all Internal Medicine residents in the country.
- The Medical School received a three-year grant for $175,000 to teach medical students about cost containment in health care. The award, from the Kate B. Reynolds Health Care Trust, is being used to develop model programs in all four years of medical school. Drs. William D. Mattern and Carl B. Lyle, Jr. are directors of the project and along with other faculty members initiated discussions with representatives of the state's three medical schools to explore coordinated efforts in teaching cost awarness.
- Fourteen medical students made presentations during Student Research Day. All were inducted into the John B. Graham Student Research Society. Dr. James B. Wyngaarden, Director of the National Institutes of Health, spoke at the awards banquet.
- The Division of Physical Therapy received a contribution to its training grant for postgraduate programs in maternal and child health for physical and occupational therapists. The $150,000 grant came from the U.S. Public Health Service.
- The Henry J. Kaiser Family Foundation has made a gift of $50,000 for an endowment fund for the annual Kaiser Permanente Award for Excellence in Teaching.
- The University received a five-year $1 million grant from the National Cancer Institute to support and expand cancer education programs in the Schools of Medicine, Public Health, Nursing and Dentistry. The activities are administered through a central Cancer Education Program directed by Dr. James F. Newsome ('47), professor of surgery.
- Mr. Glenn Wilson, professor and chair, social and administrative medicine, will head a committee which will undertake a comprehensive review of the factors which pertain to the recruitment of qualified minority students to medical school.

Key appointments and reappointments

- Dr. Gregory Strayhorn ('78), assistant professor of family medicine, was named assistant dean for academic affairs.
- Mr. James R. Turner was appointed associate dean for administration.
- Dr. Joseph S. Pagano, professor of medicine and microbiology and immunology, was reappointed director of the Lineberger Cancer Research Center.
- Dr. Tom S. Miya, professor of pharmacology in the medical school and dean of the School of Pharmacy, was reappointed chair of the curriculum in toxicology.
- Mr. Charles P. Schuch, associate professor of physical therapy, was appointed acting chair, Department of Medical Allied Health Professions.
- Dr. T. K. Harden, associate professor of pharmacology, was appointed acting chair, Department of Pharmacology.
- Dr. Donald Smith is the new director of the AHEC at Moses Cone Hospital in Greensboro.

Faculty recognition

- Dr. Stuart Bondurant, dean, was installed as president of the Association of American Physicians.
- Dr. Eric Schopler, director of division TEACCH in psychiatry, was named 1985 co-recipient of the O. Max Gardner Award, the only statewide honor given by the UNC Board of Governors.
- Dr. John C. Merritt, clinical professor of ophthalmology, received the Howard University Distinguished Service Award for "outstanding service as a physician and for exemplifying in his professional life the high ideals of Howard University College of Medicine."
- Marjory W. Johnson, associate professor of physical therapy, was the 1984 recipient of the Lucy Blair Service Award, given by the American Physical Therapy Association.
- Dr. James F. Howard, Jr., assistant professor of neurology, and Dr. Patricia F. Maness, assistant professor of biochemistry and nutrition, were 1984 winners of the Jefferson-Pilot Fellowship in Academic Medicine.
- Dr. Roy V. Talmage, professor of surgery and pharmacology, received the 1984 William F. Neuman Award of the American Society for Bone and Mineral Research.
- Nine faculty members received 1985 Junior Faculty Development Awards. They are: Drs. James E. Farber, physiology; Gene P. Siegal and Susan T. Lord, pathology; Gail E. Henderson, social and administrative medicine; Mary Beth Van Bourgondien and Nancy J. Warren, psychiatry; Gregory Strayhorn, family medicine; Stephen K. Powers, neurosurgery; and Brian Herman, anatomy.
- Dr. Kenneth Sugioka, professor and former chair of anesthesiology, was invested as a fellow in the Faculty of Anaesthetists of the Royal College of Surgeons of England.

Honor roll of Contributors

Alumni and friends who supported the school through the Loyalty Fund totaled 429 during 1984-85. Listed on the following pages are alumni and friends who made those contributions through the Loyalty Fund, the Co-Founders and special contributions. Every effort has been made to ensure accuracy. If errors or ommissions have occurred, the editors apologize in advance.

The Loyalty Fund

The Loyalty Fund is the sole means of support of the Medical Alumni Association. Contributors to the Loyalty Fund provide unrestricted funds for student scholarships and programs, publication of the Medical Alumni Bulletin and Times, and association activities such as Medical Alumni Weekend. This past year, the following people gave more than $51,000 to the Loyalty Fund.

Class of 1919

Kenneth B. Geddie, High Point

Class of 1929

Vance T. Alexander, Ridgewood, N.J.
David A. Young, Raleigh

Class of 1931

James M. Alexander, Charlotte
J. Allen Whitaker, Rocky Mount

Class of 1932

Robert E. Stone, Evanston, Ill.
Thomas J. Taylor, Roanoke Rapids

Class of 1935

Eugene B. Cannon, Asheboro
Murdo E. Street Jr., Glendon

- Three faculty members were named fellows of the American Association for the Advancement of Science: Dr. Michael Caplow, biochemistry; Dr. O.W. Henson Jr., anatomy and surgery; and Dr. Jan Hermans, biochemistry.
- Dr. Clayton E. Wheeler, professor and chair of dermatology, became the 46th president of the American Academy of Dermatology, the largest national organization of dermatologists.
- Dr. Christopher C. Fordham III ('49), University chancellor and professor of medicine, and Dr. Mary Ellen Jones, Kenan professor and chair of biochemistry and nutrition, were elected to the 21-member governing council of the Institute of Medicine of the National Academy of Sciences. UNC-CH was the only institution with two representatives among this year's appointees. A primary role of the Institute of Medicine is advising various U.S. government departments.
- Dr. James C. Cowan, research professor of social and administrative medicine, became the first recipient of the Harry T. Moore Memorial Award given by the D.H. Lawrence Society of North America.
- Dr. M. Stephen Mahaley Jr., professor of surgery, was co-recipient of the Farber Brain Tumor award, presented by the American Academy of Neurology.
- Dr. Mary Ellen Jones, Kenan professor and chair of biochemistry and nutrition, was inducted into the National Academy of Sciences and was named president-elect of the American Society of Biological Chemists.
- Dr. Charles Friedman, ORDEHP, was elected chairman of the Southern Regional Group on Medical Education of the Association of American Medical Colleges.
- Dr. Luther M. Talbert, professor of obstetrics and gynecology, received the Medical Alumni Association's Distinguished Service Award.
- Dr. Pierre Morell, director of the neurobiology curriculum, was named president-elect of the Association of Neuroscience Departments and Programs and chairman of the education committee of the Society for Neuroscience.
- Dr. Floyd Denny, professor of pediatrics, received an honorary doctorate from Wofford College, his alma mater.
- Dr. John T. Sessions, professor of medicine, was awarded mastership in the American College of Physicians.
- Dr. Cecil G. Sheps, professor of social and administrative medicine, received the Louis Gorin Award for Outstanding Achievement in Rural Health from the National Rural Health Care Association.
- Dr. William C. Trier, professor of surgery, was voted president-elect of the American Association of Plastic Surgeons.
- Susan J. Beck, assistant professor of medical allied health professions; Dr. Nancy J. Warren, assistant professor of psychiatry; and Dr. Robert J. Wells, assistant professor of pediatrics, received Spencer Foundation Young Scholars grants.

Honor Roll

Class of 1936

Sherwood W. Barefoot, Greensboro
Leo Esbin, Wantagh, Long Island, N.Y.
Otto S. Steinreich, Akron, Ohio

Class of 1937

Elizabeth J. Dotterer, Sanford
C. Willis Sensenbach, Oak Ridge, Tenn.

Class of 1938

Thomas W. Crowell, Bellingham, Wash.

Class of 1939

Jesse Appel, Kew Gardens, N.Y.

Class of 1940

Phil L. Barringer, Monroe
Inez W. Elrod, Huntersville
Henry C. Guynes, Rockwall, Texas
French H. McCain, Bloomfield Hills, Mich.

Class of 1941

James W. McLean, Fayetteville
Frederick L. Tunick, Neponsit, N.Y.

Class of 1942

Jerry H. Allen Jr., Springfield, Mo.
Frederick A. Blount, Winston-Salem
Louis D. Hayman Jr., Beaufort
William E. Hoy Jr., Ashland, Ky.
John H. Miller, Bartow, Fla.

Class of 1943

March

Julian T. Brantley, Greensboro
James B. Greenwood Jr., Charlotte
William N. Hubbard Jr., Kalamazoo, Mich.
George L. Jordan Jr., Houston
John H. Reed, Gainesville, Ga.

Class of 1943

December

Hilda H. Bailey, Salisbury
William H. Meroney III, Portsmouth, R.I.
Malone Parham, Henderson
Herbert W. Park, Richmond, Va.

International activities

- The program for International Training and Health (INTRAH) was awarded a contract of nearly $20 million to strengthen health training programs in about 15 African and six Asian nations. The five-year contract from the U.S. Agency for International Development is among the largest ever received by the medical school.

And more

- Dr. D. Carleton Gajdusek, chief of central nervous systems studies at the National Institutes of Health, delivered the 1984 Merrimon Lecture.
- Nobel laureate Sir John Vane, research and development director for the Wellcome Foundation in Kent, England, spoke at the medical school during a seminar co-sponsored by the cancer research center and the pharmacology department.
- Dr. Donald E. Wilson, professor and chair of medicine at Downstate Medical Center, State University of New York, delivered the fifth annual Lawrence Zollicoffer Memorial Lecture.
- Dr. Kenneth Crispell of the University of Virginia School of Medicine gave the 1985 Spicer-Breckenridge Memorial Lecture.
- Dr. Jan Klein, director of the department of immunogenetics, Max Planck Institute, Tubingen, West Germany, was a Culpepper Visting Lecturer.
- Dr. Geroge D. Lundberg, editor of the Journal of the American Medical Association, spoke as part of the Current Topics in Laboratory Medicine and Pathology series.
- Dr. Raymond Erikson, distinguished cancer researcher at Harvard University, was Wellcome Visting Professor.

Research Accomplishments

- The School of Medicine continued to attract substantial support for its teaching and research programs. Annual expenditures have been:

Federal grants and contracts	$34,313,051
Gifts & non-government grants and contracts	$ 8,383,435
Scholarships and loans	$ 2,335,997
	$45,032,483

Class of 1944

Robert J. Andrews, Wilmington
J. Vincent Arey, Concord
Carroll H. Lippard, Lynchburg, Va.
Edward J. Wells Jr., Wilmington

Class of 1945

J. Hicks Corey Jr., Chattanooga
Robert G. Fitzgerald Jr., Roxboro

Class of 1946

Roland D. Matthews, Burlington
William E. Sheely, Alexandria, Va.
David G. Stroup, East Point, Ga.
John E. Weyher, Goldsboro

Class of 1947

C. Roy Rowe Jr., Statesville

Class of 1948

Fred W. Ellis, Chapel Hill
John E. Lyday, Greensboro
Julius A. Mackie Jr., Bryn Mawr, Pa.
Frederick Mills, M.S., Syracuse
Shirley L. Rivers, Tucson
Charles L. Saunders Jr., Burlington

Class of 1949

F. Sidney Gardner Jr., Fayetteville
Spinks H. Marsh, Punta Gorda, Fla.
Aubrey D. Richardson, Baltimore
Maxine Wallace, Oakland, Calif.

Class of 1950

Frederick O. Bowman Jr., Riverdale, N.Y.
Gordon R. Heath, Lakeland, Fla.
James H. Peedin Jr., Burgaw
John F. Trotter, Decatur, Ga.
John R. Wilkinson, Fayetteville

Class of 1951

William B. Blythe II, Chapel Hill
Jack W. Wilkerson, Greenville

Class of 1953

Michael K. Berkut, Ph.D., Chapel Hill

- A special colony of nude mice provided strong evidence to researchers here that psoriasis is caused by something in the skin itself rather than by other body systems. The mice have no thymus gland and cannot reject foreign tissue. By grafting skin from psoriasis patients onto the mice, Dr. Robert A. Briggaman, professor of dermatology, has been able to show that the grafted skin maintains many of the same features as psoriasis. Non-diseased skin from psoriasis patients also begins to show some of the biochemical markers of the disease after grafting. The mouse colony has also been useful for studying new drugs which may be used to fight psoriasis. Briggaman was one of the two recipients of the Taub International Memorial Award from the Baylor College of Medicine for contributions to psoriasis research.
- Researchers in the medical center found a chemical that selectively kills cancer cells in the test tube when exposed to light from a laser. The chemical does not harm non-cancerous, healthy cells. Drs. Stephen K. Powers and G. Yancey Gillespie began experiments on rats with the compound, which they hope will become an effective treatment for brain tumors and other forms of cancer. The chemical is a form of rhodamine dye which certain tumor cells retain and normal cells excrete. After exposure to blue-green light from an argon laser, it becomes toxic and kills about 99 percent of the cell in which it is stored.
- The National Cancer Center renewed the Lineberger Cancer Research Center's core support grant for another five years. The funds, expected to total $4.5 million over the 1984-89 period, are being used to continue and expand research by the center's 80 faculty members.
- Orthopedic specialists reported that women who remain physically active, particularly after the beginning of middle age, have bones that are significantly denser and probably stronger than their counterparts who get little exercise. Among the authors of the study were Drs. Peter C. Jacobson (HS '85), Timothy N. Taft (HS '74) and Roy Talmage of the division of orthopedics, and Drs. Stephen Grubb (HS '80) and Walter Beaver.
- The National Science Foundation awarded a five-year, $600,000 grant to help establish the Center for Monoclonal Lymphocyte Technology at UNC-CH and Duke. The center will help meet the research needs of industry in immunology and the technology involved with the production and applications of monoclonal antibodies. Dr. Howard Reisner, pathology, was named to the center's advisory board. Other faculty members with funded projects include Drs. Larry Arnold, Geoffrey Haughton and Jeffrey A. Frelinger, microbiology and immunology; Dr. Gary Smith, pathology; and Dr. G. Yancey Gillespie, surgery.
- Identifying the cause of systemic lupus erythematosus, a form of arthritis that inflames and damages connective tissue, is the focus of a major new study funded by a $150,000 grant from the Arthritis Foundation. The work is being done in the school's Arthritis Research Center, whose director is Dr. John B. Winfield.

Class of 1954

Charles B. Fulghum Jr., Atlanta
Barbara M. Jordan, Lumberton
Cornelius T. Partrick, Washington
Thomas H. Patterson Jr., Farmville
Clifton L. Quinn, Raleigh
H. Durwood Tyndall, Goldsboro
Edward S. Williams Jr., Durham
Stephen G. Wilson Jr., Knoxville

Class of 1955

Julian S. Albergotti Jr., Charlotte
Ralph E. Brooks Jr., High Point
William D. Huffines, Chapel Hill
Robert C. Jordan Jr., Sanford
A. Smith Lineberger Jr., Fairfax, Va.
William L. London IV, Durham
Lloyd C. McCaskill, Maxton
Clarence R. McLain Jr., Cincinnati
J. Thaddeus Monroe Jr., Chapel Hill
Oliver F. Roddey Jr., Charlotte
Palmer F. Shelburne, Greensboro
Henry L. Stephenson Jr., Washington
Robert L. Summerlin Jr., Dublin
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Class of 1956

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John W. Deyton Jr., Jacksonville
Robert A. Farmer, Vocaville, Calif.
Charles W. Fowler III, Orlando
H. Neill Lee Jr., Lumberton
Marvin M. McCall III, Charlotte
Robert L. Murray, Roanoke, Va.
Francis D. Pepper Jr., Winston-Salem
William B. Wood, Chapel Hill

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James W. Fresh, Sardis, Ga.
Harvey A. Page, Pikeville, Ky.
Nathaniel L. Sparrow, Raleigh

Class of 1958

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George E. Ennis, Hickory
Alfred W. Hamer Jr., Morganton
John S. Howie, Raleigh
Luther S. Nelson, Amarillo
T. Lane Ormand, Monroe

- Dr. James R. Yankaskas (HS '81), assistant professor of medicine, successfully isolated and grew cells from patients with cystic fibrosis, providing researchers a new way to study the genetic disorder. Yankaskas' research also indicated that the abnormalities responsible for cell damage lie within the cells themselves and are not the result of bacterial influences, as some scientists had suspected. The ability to grow cells in the lab is especially important because animals do not get the disease and there's no effective way to study the molecular cause of the condition.
- The University's Program in Molecular Biology and Technology received a $1.5 million appropriation from the General Assembly to recruit additional faculty members and to construct a modest new research building. The program, established in 1982, is headed by Dr. Marshall H. Edgell, professor of microbiology and immunology. It involves researchers in the schools of Medicine and Public Health and the College of Arts and Sciences.
- Dr. Chung S. Kim, research assistant professor of neurology, received a $229,544 grant from the National Institute of Environmental Health Sciences to study how the body rids itself of organochlorine compounds such as Agent Orange.
- The American Cancer Society renewed the University's $60,000 institutional grant.
- Dr. David Siscovick, assistant professor of medicine, was interviewed by all three major TV networks during the media attention focused on the report of his studies of exercise. The study, conducted at UNC-CH and at the University of Washington at Seattle, was the first to weigh the relative benefits and risks associated with exercise in the same group. It showed that men involved in vigorous activities on a regular basis have only 40 percent of the risk faced by men who are inactive. Dr. Robert Fletcher, professor of medicine, was a co-author of the report which appeared in the *New England Journal of Medicine*, Oct. 4, 1984.
- Dr. Gail Bishop, a post-doctoral fellow in the Lineberger Cancer Research Center, received a $38,000 Damon Runyon-Walter Winchell Fellowship. The two-year award is made to scientists conducting theoretical and experimental cancer research.
- A research team headed by Dr. Robert S. Sandler, assistant professor of medicine, began a study to see if relatives of colon cancer patients are more likely to participate in cancer detection programs. Those with a close relative who have the disease are three times more likely to develop colon cancer themselves. The study was funded by a $120,000 American Cancer Society grant.

Patient care

- The new critical care building under construction was named the Esley O. Anderson Jr. Pavilion in honor of the chairman of North Carolina Memorial Hospital's board of directors. Anderson, a Charlotte businessman, has headed the board since it was formed in 1971. The $18.6 million building is scheduled to open in February 1986. It will allow the medical center to consolidate adult critical care beds, while providing much needed additional space for critical care teaching and patient care. The facility also will permit the final phase of the hospital's clinical laboratory consolidation, and it will house new medicine and surgery units, as well as various clinical support services.

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- N.C. Memorial launched a program to help make sure its elderly patients received proper care after leaving the hospital. It was financed in part by a two-year $45,000 grant from the Duke Endowment and the Kate B. Reynolds Health Care Trust.
- The General Assembly appropriated $2.6 million for purchase and installation of a magnetic resonance machine at the medical center. Magnetic resonance is a computerized diagnostic tool that can give physicians detailed images of internal organs and tissues without subjecting patients to X-rays. The device is being housed in a special building constructed for that purpose near the Lineberger Cancer Research Center Building.
- Dr. Kenneth L. Cohen, assistant professor of ophthalmology, was awarded $226,420 by the National Eye Institute for a three-year study of corneal astigmatism following corneal transplants.
- Hemophilia patients being treated in Chapel Hill played an important role in last summer's breakthrough concerning the cause of acquired immunodeficiency syndrome (AIDS). Researchers at UNC-CH, Duke and the National Cancer Institute had tested more than 100 blood samples from hemophilia patients in Chapel Hill during the previous year. One of these samples proved to be particularly valuable in detecting the presence of HTLV III virus, the virus identified by NCI researchers as the cause of AIDS. Hemophilia patients here continued to participate in the effort to develop a test to detect the disease and a vaccine to prevent it.
- Dr. Harold C. Pillsbury III (HS '81), associate professor and chief of otolaryngology, was one of 35 investigators in the United States involved in clinical evaluation of an electronic device called a cochlear implant. The device can restore some hearing to certain totally deaf patients. It received Food and Drug Administration approval during the year.
- Medical center physicians began using ventricular arrythmia surgery, a type of electrocardiogram performed from the inside of the heart to pinpoint the source of irregular rhythms which can threaten a patient's life. The new technique permits surgeons to remove the portion of the heart which is causing the heart to function erratically.
- Physicians here began studying a new treatment for women with ovarian cancer. The treatment, a "belly bath," may significantly improve the patient's chance of survival. The doctors inject a radioactive isotope called P-32 into the abdomen of a woman when she comes in for follow-up surgery about one year after her cancer was first treated. Participants in early studies had a 79.9 percent survival rate four years after treatment. The survival rate for patients treated in a more traditional fashion is 10-20 percent. Physicians studying the treatment include: Drs. Wesley C. Fowler, Jr. ('66), Leslie A. Walton and John L. Currie ('67), obstetrics and gynecology; and Drs. Mahesh A. Varia, Jan Halle, Julian G. Rosenman and Patricia Edkins ('80), radiology.
- Eye surgeons began using a painless, 15-minute office procedure to help people whose vision gradually failed after cataract surgery. Called laser capsulotomy, the procedure involves firing high-speed laser beams at a capsule of tissues that cradles the eye lens. That tissue sometimes becomes cloudy in cataract patients whose natural lenses have been replaced with artificial ones.

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- North Carolina's first set of "test tube" triplets were born at North Carolina Memorial Hospital. The babies were conceived through Memorial's *in vitro* fertilization program. Their parents, Margaret and Christopher Lyerly, had been referred here by Dr. Edwin Fulghum ('75) of Statesville. The birth of the triplets generated much interest and media attention nationally.
- The Memorial Hospital board of directors approved a heart transplant program, and a national search began for a director.
- The Division for Disorders of Development and Learning was one of four centers in the United States selected to study a new drug which shows promise for children who are hyperactive or have conduct disorders, particularly those who do not respond well to stimulant drugs.
- Medical center scientists invented a new portable blood pressure monitoring device that many help doctors treat patients with hypertension more skillfully and help researchers as well. The device, called the Accutracker 102, was developed by Stan Hutcheson and Dr. Paul Obrist, psychiatry, and engineering assistant Edward Lutz. Half the size of a lunchbox, it weighs about 3 pounds and can be set to work at pre-determined intervals.

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Class notes

Manning-Berryhill Club

Henry C. Harrill, C. Med. '31, of Greensboro, has retired from the practice of urology. He has been medical director of Community Blood and Plasma Bank since 1978. He has two daughters and five grandchildren.

Samuel Allen Hope, C. Med. '33, of Beulaville, has retired from his internal medicine practice.

Sherwood Barefoot, C. Med. '36, had a great time at the 50th reunion of the UNC Medical Class of '35. But Barefoot said he was the only one in attendance from the C. Med. Class of '36.

Charles F. Melchor Jr., C. Med. '40, is now a permanent retired resident of Myrtle Beach and has moved into a new home.

Charles Tillet, C. Med. '44, has opened Tillet's Outpatient Eye Surgery Center in Charlotte.

Erle E. Peacock Jr., C. Med. '47, was awarded the Clinician of the Year Award by the American Association of Plastic and Reconstructive Surgeons at its annual meeting in San Diego. Peacock is in private practice in Chapel Hill.

Joseph T. Miller, C. Med. '49, of Gastonia says that no one else from his class is in practice in Gastonia, but the town is full of UNC Medical School graduates.

Wesley Grimes Byerly, C. Med. '50, was awarded the first oak leaf cluster for his meritorious service in the United States Army Reserve. Byerly is in private practice in Hickory where he lives with his wife Kay and their three children.

50s

William R. Percell, M.D. '56, is in pediatric practice in Laurinburg with Jim Smuthwick, M.D. '70, Jim McQueen, M.D. '70 and Fred Mabray, M.D. '77.

Dean C. Jones Jr., M.D. '56, and wife Evelyn still live in Jefferson. Evelyn has recently opened a health food store in West Jefferson. Dean still fishes for trout as often as possible.

Charles D. Wallace, M.D. '58, is president of the medical staff of the Holly Hill Hospital in Raleigh.

John A. McGee Jr., '58, is in a five-man ob/gyn practice in Charlotte. He is also an instructor at Charlotte Memorial Hospital. He and wife Julia have four children.

60s

Kenneth Weaver, M.D. '60, is living in Johnson City, Tenn., where he is associate professor of ob/gyn at Quillen-Dishner College of Medicine. He is co-chairman of the council on nutrition in obstetrics and gynecology of the American College of Nutrition. Weaver also serves on the editorial board of the Journal of the American College of Nutrition.

Marion Griffin, M.D., '62, travelled to Nepal for four weeks in August and September. He did surgery at the hospital in Patan just south of Katamandu.

Dave M. Davis, M.D. '63, is practicing clinical and forensic psychiatry in Atlanta. He has been elected president of the American Association of Psychiatric Administrators.

Carole B. Tiedeman, PT '63, was chosen as part of a physical therapy speech team from South Carolina to attend a six-day course on "Augmentative Communication-Assessment and Intervention" at the University of Alabama. There were teams from nine southern states attending the course. Each team was obligated to conduct secondary level training for at least 10 professionals in their respective states.

James W. Rose, M.D. '64, recently finished duties as chief of staff at St. Mary's Hospital in Madison. Although he still has a busy internal medicine practice, Rose has more time now to travel, bicycle, garden and tend his bee farm.

Gordon B. Legrand, M.D. '65, is a pathologist at Wake County Medical Center. He and his wife Judy have two children, Gordon, 14 and Charles 9. He enjoys boys' soccer and sailing.

Malcolm N. McLeod, M.D. '65, is clinical professor of psychiatry at UNC. He is a faculty member of the UNC-Duke Psychoanalytical Institute. He enjoys jogging, golf and long-distance biking.

Robert L. Grubbs Jr., M.D. '65, is professor of neurosurgery at Washington University School of Medicine. He is on the editorial board of *Neurosurgery* and consults frequently for the National Institutes of Health. During his leisure time he plays tennis, does some gardening and keeps up with two children. He and wife Julia travel when time permits.

John G. Briggs Jr., M.D. '69, of Fayetteville, has been elected chief of staff of Cape Fear Valley Medical Center. He also serves on the board of directors of the Cardinal Health Agency.

70s

Jerry C. Bernstein, M.D. '70, is in group practice in Raleigh, specializing in pediatric allergy. He has "embraced" the running craze and runs 10 to 15 miles per week. Aside from running and work, Bernstein and wife, Peg spend their time with their girls, Beth, 7 and Blair, 3. "Every day is a joy," Bernstein says.

Mary Dawn Herring Edwards, M.D. '70, lives in Pittsburgh with her husband David and two children Leah, 8 and Rachel, 4. She completed her pediatric residency at Children's Hospital in Pittsburgh and is now in practice with the Alleghany County Health Department in Pittsburgh.

Christine L. Oliver, M.D. '70, is currently practicing at Massachusettes General Hospital in Boston in internal and occupational medicine. She finds time for running (a dangerous occupation in Boston) cooking and movies.

Dave Rendleman, M.D. '70, is in private practice in orthopedic surgery. He is also chief of surgery at Wake, Rex and Raleigh Community Hospital. Rendleman is on the board of directors at Raleigh Community Hospital and Wake County Friends of Children. In his spare time he enjoys golf and is on the board of governors of the North Ridge Country Club. He and wife Mary have two children, Anne and Kate.

David A. Grimes, M.D. '73, went to Ethiopia on a consultancy with the World Health Organization last March. He taught reproductive epidemiology to African physicians from Ethiopia, Kenya, Cameroon and Zimbabwe.

Linn Hatley, Henry Temple and Jean Bolan, M.D. '76, were inducted as new fellows of the American College of Obstetricians and Gynecologists. Hatley is in practice in Durham, Temple in Wilmington and Bolan in Washington, D.C.

Tate M. Rogers, M.D. '76, is enjoying family practice in Cary.

James J. Bedrick, M.D. '77, has opened a new office in Charlotte for the practice of ophthalmology. Jim and Adele invite their fellow alumni to drop by and visit.

Robert W. Newell, M.D. '78, is now in the practice of neonatology at the Children's Hospital in Greenville, S.C. He and wife Patricia have five children.

Melinda Jo Maness, P.T. '79, is serving a two year term as a physical therapist in a mission hospital in Nyankunde, Zaire. The hospital is operated by African Inland Mission, a Christian mission headquartered in Pearl River, New York. Until last year, Melinda was a physical therapist at Rex Hospital in Raleigh. Before joining the mission Melinda attended a French-language school in southern France.

Douglas Delong, M.D. '79, is living in Ladysmith, Wis. He says he's pretty much settled in the Northwoods and still looking for the elusive idylic building spot. He's still playing basketball and doing some running in local marathons. Delong says "we aren't on the way to anywhere but all are welcome any old time. Please send barbeque."

R. Thad Goodwin, M.D. '79, recently opened a new office for the practice of ophthalmology in Fort Myers, Fla. He is now a diplomate of the American Board of Ophthalmology. He loves living in southwest Florida and is only a few miles from the Gulf. He still enjoys playing the organ and traveling when he has the time.

Bruce Carl Becker II, M.D. '79, of Lombard, Ill., is chairman of the Department of Family Practice of St. Mary of Nazarena Hospital Center in Chicago. He is also vice chairman of the Department of Family Practice, University of Health Sciences Chicago Medical School. Becker is listed in the 19th Edition of Who's Who in the Midwest.

80s

Anna L. Williams, M.D. '80, has completed an ultrasound/CT fellowship at Georgetown University Hospital. She has joined Washington Radiology Associates. She is married to Wayne B. McLurkin and they reside in Washington.

Vincent E. Paul, M.D. '76, HS '81, has been elected into the American Academy of Orthopaedic Surgeons. He is in practice in Greensboro with Robert B. Sypher Jr., HS '82.

Ron Walters, M.D. '81, is chief resident in general surgery at the University of Washington in Seattle.

Elwood E. Stone, M.D. '81, is chief of gastrointestinal and genitourinary radiology at David Grant USAF Medical Center, Travis AFB, Calif. He and his wife Barbara have a new son, Jordan.

William B. Olds, M.D. '81, is in family practice at the Family Medical Center in Roxboro.

Patricia D. Weavil, M.D. '81, has been appointed to the faculty of the Bowman Gray School of Medicine at Wake Forest as instructor in pediatrics. In her new position, Weavil will be responsible for teaching, patient care and research. Her primary research interests are the effectiveness of a new vaccine for hemophilus influenza and a new antibiotic for the treatment of urinary tract infections and pneumonia. She is married to Ricky D. Weavil.

Clay Richardson, M.D. '82, is in practice in Glen Alpine. He and wife Wanda have a child, Maggie.

Thomas Macklin Moss, M.D. '82, finished his family practice residency in Roanoke, Va. and spent the next few months canoeing the rivers of Virginia before moving to Phoenix to join three other physicians in family practice.

Eric Van Tassel, M.D. '82, is finishing his residency in internal medicine at the University of Alabama Medical Center. He will be starting his fellowship in cardiology there.

Eddie Smith, M.D. '84, has just been elected assistant chief resident of Forbes Family Practice Residency in Pittsburgh.

Deaths

Malory A. Pittman Jr., M.D. '61, Wilson

Glenn S. Edgerton, C. Med. '30, Charlotte

Calendar

April
18 Medical Alumni Weekend

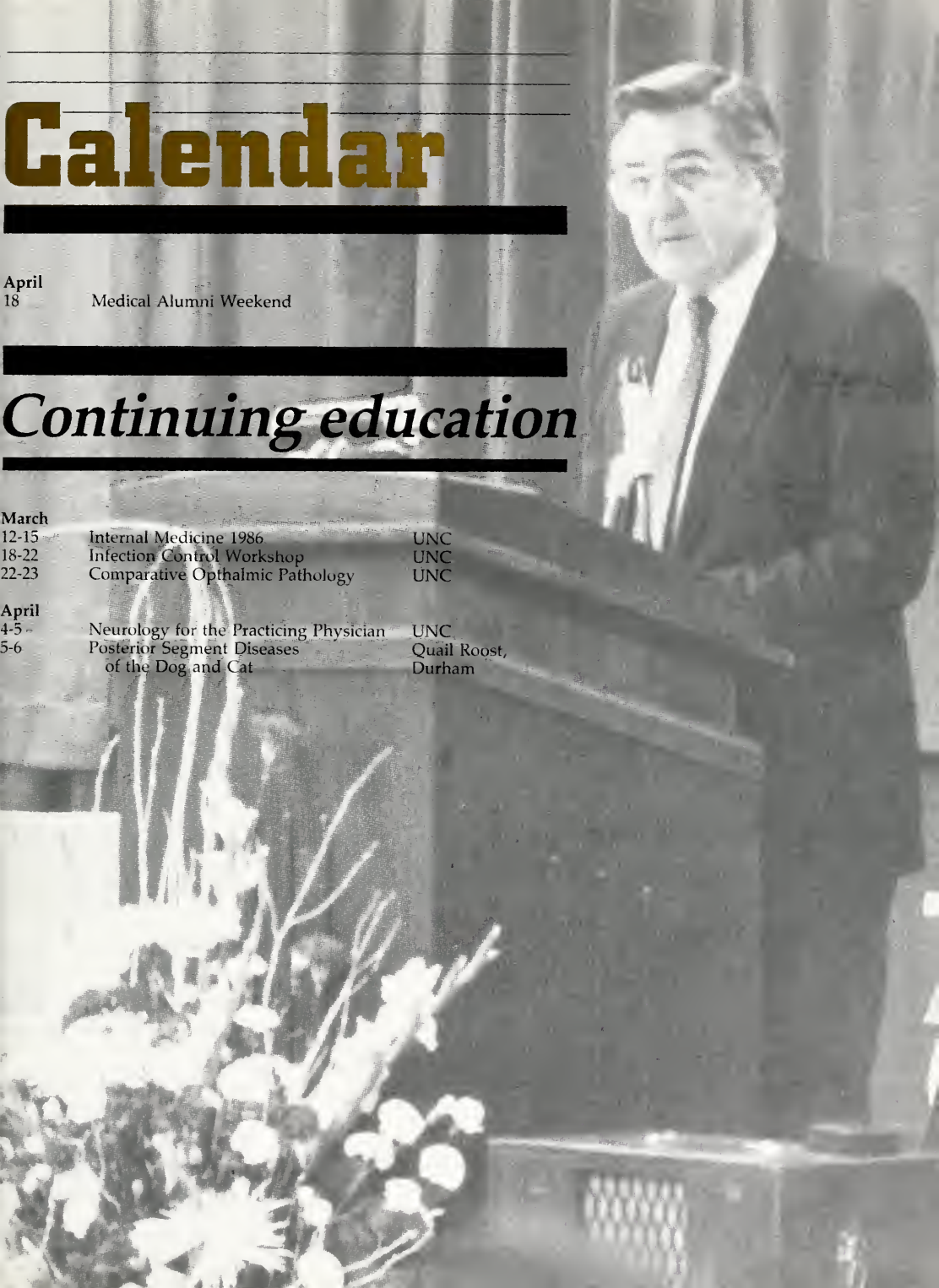
Continuing education

March

12-15	Internal Medicine 1986	UNC
18-22	Infection Control Workshop	UNC
22-23	Comparative Opthalmic Pathology	UNC

April

4-5	Neurology for the Practicing Physician	UNC
5-6	Posterior Segment Diseases of the Dog and Cat	Quail Roost, Durham



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Behind the lines

The pediatrics department paid tribute to Dr. William Gronemeyer recently, remarking on his many contributions to patient care and medical education. Dr. Gronemeyer joined the faculty in 1978 after "retiring" as professor of pediatrics at Wayne State University.

Students and fellow physicians alike are impressed by his continual quest for knowledge—he was called the "perpetual student" and a "role model for students to keep on learning and keep on striving."

This issue marks my second as *Bulletin* editor and I, too, am continuing to learn. As I strive for a publication that will meet the many needs of alumni, I appreciate hearing your comments and suggestions on how I can continue to follow the example set by Dr. Gronemeyer.

The sixth annual Lawrence Zollicoffer Memorial Lecture was well attended by faculty, students and alumni. Dr. Jeanne Spurlock, deputy medical director for the American Psychiatric Association, spoke on "Promotion of Mental Health: Multiple Roles of Physicians."

An endowment fund for the Zollicoffer Lecture has been established. Both faculty and alumni have begun making contributions. Interested alumni may make their donations to the Medical Foundation of North Carolina, designating the Zollicoffer Lectureship.

At press time, the spring Alumni Weekend was just about to happen. Look for highlights in the next issue. **SSF**

Inside back cover: *Natasha, a puppy from the Orange County animal shelter, visits with a Chapel Hill nursing home resident. Betsy Halleck Giduz, a clinical instructor in the UNC School of Medicine's Program on Aging, brings puppies and kittens to the nursing home.*

Dr. William Gronemeyer holds a portrait of himself, along with his wife Billie, and Dr. Thomas Boat, chairman of the Department of Pediatrics. The portrait will hang in the London Library in the pediatrics accute care clinic. An award named for Gronemeyer will go each year to the outstanding resident in general pediatrics.

The Video Center

What makes this technology so special is its ability to photograph the inner workings of a single living cell in action without appreciably damaging the cell.

Some people casually refer to it as "the video center," but the TV images produced there are neither casual nor made for public consumption. In fact, it takes a certain mentality to appreciate them—a scientific mentality.

The so-called video center, located in the cell biology laboratories of the School of Medicine's Department of Anatomy, is gaining widespread recognition for processing close-ups to decipher the way whole, living cells—human or otherwise—actually live, multiply and die.

The anatomy department is one of only a few places in the country that has developed the technology for producing such pictures. Known as ultra low-light, digitized video microscopy or digitized fluorescence microscopy (DFM), the system combines the precision of light microscopy and fluorescent light optics with the marvels of microcomputers and sensitive video cameras borne out of the U.S. Army's night vision program.

The result is a high-powered technology that allows researchers to see, record and analyze intricate cellular behavior never before witnessed.

What makes this technology so special is its ability to photograph the inner workings of a single living cell in action without appreciably damaging the cell. Once captured, the cellular dynamics can be enhanced and converted into numerical data by a microcomputer for easier interpretation.

More conventional techniques, such as electron microscopy or biochemistry, either provide static images from dead cells or otherwise destroy the delicate relationships among cellular components. Both drawbacks reduce the chance of knowing what is really happening inside the cells.

But combine those techniques with the ability to see various structures and molecules operating intact within a cell, and biological research suddenly moves within reach of answering such crucial questions as: how cells move, how they are regulated, what happens when they die and possibly how they become altered in diseases such as cancer and atherosclerosis. Moreover, solving those mysteries may suggest ways of preventing or reversing abnormal states.

The scientists directing the school's DFM facility are Dr. Ken Jacobson, an associate professor of anatomy who began developing the system in 1980, and Dr. Brian Herman, an assistant professor who joined the effort in 1983. Additional technical input has come from Dr. Richard Johnson, director of the biomedical engineering program; Dr. James DiGuiseppi, a UNC-CH biomedical engineering graduate with a Ph.D. in biochemistry; Dr. Richard Inman, an astrophysicist with a Ph.D. in physics from UNC-CH; postdoctoral fellows Drs. Akira Ishihara, Hans-Georg Kapitza and Lerson Tansugarn; and graduate students George

McGregor, Bruce Holifield and Zhang Fen.

Their work has been supported financially by the National Institutes of Health, the American Cancer Society, the American Heart Association, the Whitaker Foundation and the N.C. Board of Science and Technology, as well as the School of Medicine and Department of Anatomy.

After several years of refinement, the system is now operating at full speed with about six research projects under way and many investigators in line to test potential applications. The current studies involve:

- understanding the abnormal growth and spread of cells in cancer and atherosclerosis;
- improving the chances for successful **in vitro** fertilization and wound healing;
- prolonging the life of liver cells, which could enhance opportunities for liver transplants;
- forming new skin for patients with severe burns or skin diseases; and
- promoting the growth of skeletal muscle in poultry to fatten profits for the state's leading agricultural industry.

These projects are being conducted by investigators from the departments of anatomy, obstetrics and gynecology, and dermatology; the UNC Lineberger Cancer Research Center; and the poultry science department at N.C. State University.

Jacobson, who is studying the mechanism of cell locomotion, believes the technology may also improve the accuracy of clinical diagnoses one day. "We'd like to look for the presence of characteristic antigens to diagnose particular diseases, for example, using either fluorescent antibodies to detect the antigens or genetic engineering methods," he said.

The precision with which fluorescent probes attach themselves to specific molecules is, in fact, critical to digitized fluorescence microscopy. Every DFM application involves attaching fluorescent tags to purified molecules and binding them to the cell's surface or injecting them into cells. Researchers can then record the movement of the glowing molecules, using a television camera that operates with very little light. Less sensitive cameras cannot be used because higher levels of lights will excite the fluorescent molecules too much and burn up the cells.

In general, the amount of a molecule present in and around a cell can be measured by observing the amount of light that the molecule emits due to its fluorescent tag. High amounts of light, for example, would signify a high concentration of the molecule.

James DiGuiseppi, a visiting lecturer in anatomy, examines a living cell through a light microscope, which is part of the department's low-light, digitized video microscopy system. The system's low-light video camera is in the foreground to the left, and a computer-enhanced image of the cell appears on a video monitor in the background.

A video camera takes pictures of the cell and its light-producing molecules, and a computer enhances the images by laying several of them on top of each other. If desired, a researcher can convert the images into numerical data by instructing the computer to assign numbers to the various degrees of brightness. In addition, the images can be color-coded by assigning colors to the levels of brightness.

Herman is using the DFM technology to learn how growth hormones signal cells to grow and what regulates this process. In particular, he is trying to see what changes may be occuring in the cell's level of acidity and calcium concentrations as it absorbs growth hormones.

"We think this is very important in the larger picture of how cells grow and then what happens in cases where cells grow out of control as in cancer," he said.

The growth hormones that Herman is studying are secreted by platelets and cancerous tumors. They also affect the growth of skeletal muscle and cause smooth muscle cells in arteries to grow rapidly, which is responsible for the development of arthrosclerosis. By tracing the hormones with DFM techniques, UNC researchers hope to improve their understanding not only of cancer but also of artherosclerosis.

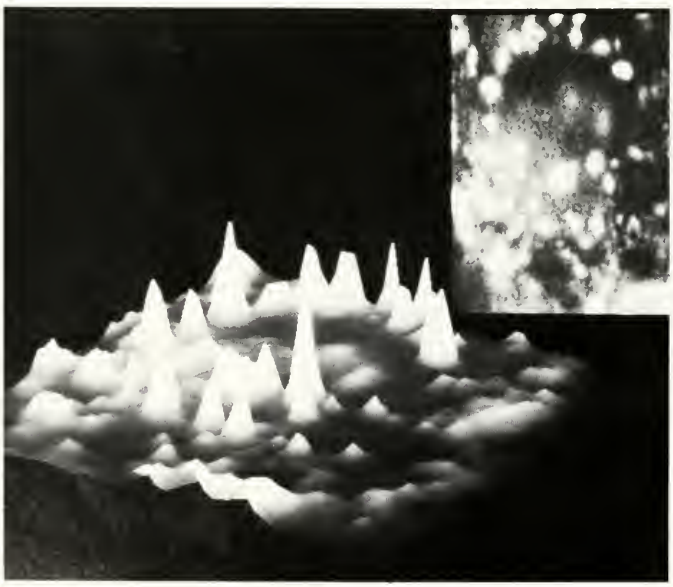
Investigating calcium's potential role in the death of cells has also been a high priority at the DFM facility. Before the new technology was developed, there was really no way to measure calcium in an intact cell while it was dying or even to document the onset of irreversible cell death. Consequently, scientists have been conducting studies on the popular but unproven theory that cells die after first absorbing large amounts of calcium.

But the level of calcium within a cell bears no relation to whether the cell will die, according to recent research conducted at the DFM facility by anatomy professor Dr. John Lemasters.

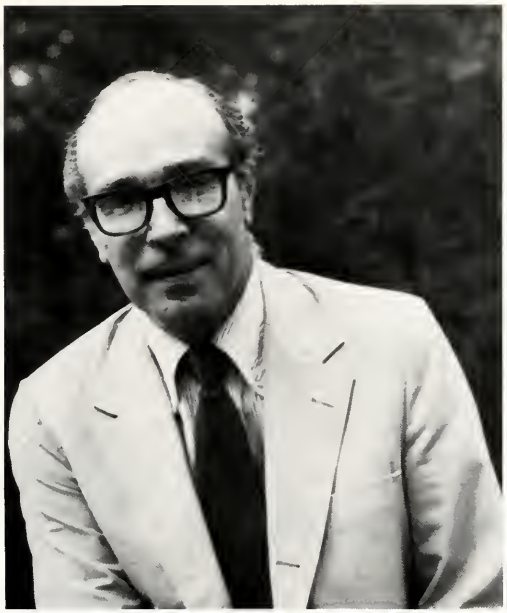
Similarly, the ability to measure calcium in living cells is helping dermatology professor Dr. Edward O'Keefe in his study of skin formation. By further understanding how skin grows, O'Keefe hopes to find ways of generating new skin tissue for patients with skin diseases or severe burns.

As the studies indicate, the advanced technology of digitized video microscopy promises to help scientists of many different disciplines disprove old theories, advance new ones and move forward into the unknown realms of cellular biology.

"With this technology, we have been able to get around many limitations of other techniques," Herman said. "We believe it is opening up entirely new avenues of basic research on living cells and paving the way for producing treatments for a number of diseases."



A computer-generated picture and surface map of fluorescent endosomes, both produced by the DFM system.



Dean's page

The Gramm-Rudman Act, the 1987 Federal Budget and the Tax Reform Act now before the United States Senate will have profound effects upon the future of many aspects of life in the United States notably higher education, medical education, and medical practice.

While the precise nature of these changes is unclear at this time, the certainty that substantial reductions in federal expenditures for education and health will be included in the deficit-reducing programs widely considered to be so important to the economic future of the country has caused many of us to begin considering how best to adapt to these new constraints. For example, it seems clear that federal support for residency programs will be reduced and it is possible that the mix of specialties in which residents are supported will be changed. If these changes take place as now anticipated, they will have substantial effect upon the patient care in tertiary care hospitals, upon the teaching of medical students since residents are an important source of clinical instruction, and upon the specialty mix of physicians in the future.

The federal support for medical research and for the training of medical researchers is also being reduced and some projections anticipate cuts in research support which would effectively halt much of the American biomedical research effort. Similarly, reductions in federal support for student financial aid would heighten the existing economic barriers to careers in medicine. The foregoing are heavy and important matters and many of us are working to assure that our School draws upon the best available wisdom to adapt so that its programs of teaching, research and patient care continue to serve the people of the State and the Nation in the most effective ways possible.

The work and challenge of dealing with policy and economic matters on behalf of the School has been refreshingly relieved this spring by my involvement in the celebration of the 100th anniversary of an organization devoted to "the advancement of scientific and practical medicine."

It has been quite a century! Not only has the past century brought us a long way in understanding disease and illness and in discovering and applying interventions, but it has also laid a solid base for current and continuing improvement in the effectiveness of the practice of medicine. While there will surely be continuing change in both the content and the form of clinical practice, I am among the optimists who believe that despite Gramm-Rudman, DRG's and expenditure reductions, the fundamental human relationship of the physician and the patient will persist as the unique and central focus of clinical practice. And that knowledge, understanding, and wisdom will continue to be the essential and rewarding tools of the physician, DRG's, Gramm-Rudman and the regrettable spreading acceptance of medical care as a commodity to the contrary notwithstanding.

He's captain of a 'ship of healing' at Lejeune

More than 40 casualities poured into the Camp Lejeune Naval Hospital on April 2. Sirens shrieked. Men with compound fractures and chest wounds moaned. And shell-shocked psychiatric cases wandered the halls, shouting their anguish.

But when the dust from the make-believe crisis had cleared, medical staffers could relax. "Victims" could peel off their rubber moulage "wounds." And all could reflect on how the mass casualty drill had been a complete success.

Once again, Capt. John D. Marriott, M.D. '62, had proved himself the captain of his ship.

In the world of the U.S. Navy, where a hospital is not a hospital but an anchored craft, where walls are "bulkheads" and floors are "decks"—and where chaos can erupt at any moment-Marriott, the commander of Camp Lejeune Naval Hospital, is as much military man as medical doctor.

A friendly, salt-and-pepper-haired physician who in a recent interview wore service dress blues, not medicinal white, Marriott explained his allegiance by pointing to international signal flags flapping in the breeze outside his modern, 205-bed hospital ship.

"I'm always very proud that we're here, and we do it well," Marriott said. "It's just like the flags say—'Ready to receive, ready to serve'—and that's what we want to do."

Marriott, whose specialty is radiology, has served since 1965 when he chose a Navy residency instead of a civilian one. In the intervening years, he served at two naval hospitals outside North Carolina, aboard the USS Sanctuary in the South China Sea during the Vietnam War, as a radiology consultant to the Navy's surgeon general, and as commanding officer at the Camp Lejeune hospital since February 1983.

As the man at the helm during the October 1983 bombing of Marine headquarters in Beirut—when 56 of the wounded servicemen were brought to his hospital—and again as the lead physician during last November's major helicopter crash on base, Marriott has experienced firsthand the value of military discipline and preparedness.

"You have to keep practicing," the 49-year-old Battleboro native said of the recent drill, "If you don't practice, I don't care how good you are. You get rusty."

On Sunday, Oct. 23, 1983, the practicing paid off. That rainy morning, Marriott put an 18-member surgical team on one aircraft to be flown to Grenada, and waited for another to bring casualties from Beirut. "We didn't know where we were with Beirut. Both things were going on at the same time," he recalled of that frenzied day.

Hours went by and reports of injuries dwindled, while reports of deaths mounted, he remembered.

After 24 hours, word came down that Lejeune's hospital would be the primary evacuation site for all wounded except those suffering severe head injuries and burns. About ten days later, the Beirut victims arrived. "No matter how badly injured, they were very spirited, proud people angry about what happened to them," Marriott said. "But I never heard anyone express doubts, because they were military—Marines and sailors."

He recalled being particularly touched when one sailor with severe pelvic injury and a foot blown off worried less about himself than how to get his monthly payment to his foster plan child in Mexico.

That kind of attitude persisted when 11 injured Marines again came crowding into the emergency room after the Nov. 19, 1984, helicopter crash at Lejeune. "Again, the system responded in a way that makes me proud," Marriott said.

More and more, military medicine is responding in a way that saves lives on the battlefield, the Navy doctor said. Development of fleet hospitals, better triage—or categorizing of injuries—the revival of hospital ships, and efforts to get sophisticated diagnostic tools to the battlefront all have helped, he said.

Mobility—fine-tuned by the MASH units of Korea—and battalion aid stations, front line aid, are military hallmarks, he said.

"That's why military teams are frequently called into natural disasters—because we have 'mobile medicine,' " Marriott said.

He said that where military hospitals may lag behind civilian hospitals is in image. "Many people think that since we're salaried and we don't get paid fees for service, therefore we will not be as responsive or attentive to the patients' needs. I think that's entirely untrue," he said.

"I think our people are motivated totally by their concern for the patients and sensitivity to their needs. It's not a matter of direct reimbursement."

Military hospitals' reputations for overly long waiting periods for treatment in clinics are "unfortunately true," Marriott acknowledged. Otherwise, he said, "This is a good hospital and I think it stands equal with any (civilian) hospital equivalent in size and staffing anywhere in the United States." The new $45.3 million Lejeune facility opened in February 1983 as a medium-sized naval hospital, Marriott said. It has 420,000 square feet, 205 beds, with room for 31 more, and deliveries of twice as many babies as Bethesda, the Navy's third largest hospital. (San Diego is No. 1.)

The Lejeune hospital also treats 500,000 outpatients per year, performs 300 major surgical procedures annually and admits 20 to 30 patients a day. With 900 staffers, including 50 doctors, it is responsible for 40,000 active duty personnel and 105,000 dependents.

The captain in charge of this ship is a farmer's son who early on heard the call of the military while growing up in Nash County during the dramatic years of World War II. Troop movements were occasion for a trip to the railroad crossing at Battlesboro. And cousins were marching off to war. "I just had the greatest respect for the military and never lost it," Marriott said.

But other factors also vied for the youth's attention. Should he become a farmer like his father, Robert Henry Marriott, or a country doctor like his grandfather and great-grandfather? Medicine won out.

One reason was the presence of his younger brother Henry, affected by Down's syndrome since birth. Then there was Grandpa Marriott himself. "He was truly a horse-and-buggy doctor, a great lover of horses," Marriott said with a laugh. "He was truly able to sleep coming home from calls because the horse knew the way.

"From my earliest memory, I wanted to go to Carolina, I wanted to be a doctor. Primarily, my grandfather influenced me. ...He enjoyed such a level of esteem in the community. I really think that was the main thing that directed me to a love of medicine."

At Chapel Hill, Marriott studied history, enrolled in medical school, and married a brown-eyed woman from home. It was a courtship that began with a blind date and leapfrogged into a proposal partly spurred by the lack of student housing at UNC.

In the years that accompanied his medical school stint, events tumbled in on top of each other:

the birth of his son in Chapel Hill, his draft into the Navy, the birth of two daughters, and his decision to specialize in radiology. "They (radiologists) seem to be the happiest when they came to work, and they were still smiling when they left," Marriott quipped.

Then there was the choice of the Navy—for life. Serving two years of the Vietnam War on a hospital ship that cruised the coastline from the DMZ to Da Nag, Marriott never regretted his choice, despite the gore he witnessed during an average 5,000 medical helicopter landings a year. "It was, except for the separation from family, probably the best year I spent in the Navy in terms of feeling really worthwhile," Marriott said. From day one, he said, he was particularly impressed with the Marines. "No matter how badly injured, their first thought was to get back in country, in the bush. They really lived up to their motto."

Today, Marriott looks forward to a future of continued service with the Navy.

Though he still thinks of the Battleboro farm as home, Marriott—always the Navy man—intends to spend that future near the water. "I want to live near the coast," he explained. "Some people say we all come from the sea and a certain number say we want to return to it.

"But I just say, I find it restful—the smell of the salt spray—and I like to go to sleep listening to the waves—and wake up to the call of the sea."

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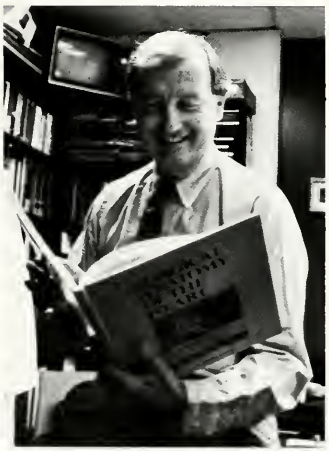
Wilcox Authors New Text

A handsome new book authored by Dr. **Benson R. Wilcox,** M.D. '57 called *Surgical Anatomy of the Heart,* vividly displays anatomical details that are vital for the clinician who cares for the patient with surgical heart disease.

Dr. Wilcox is chief of the Division of Cardiothoracic Surgery in the School of Medicine.



He wrote the book in collaboration with Dr. **Robert H. Anderson,** Joseph Levy Professor of Paediatric Cardiac Morphology of the University of London. It has been well-received by many of their cardiology colleagues.

Dr. Lawrence H. Cohn, of the Brigham and Women's Hospital in Boston, reviewed **Surgical Anatomy of the Heart** in the **New England Journal of Medicine.** He said: "This is a well-organized book by two very experienced authors particularly in congential heart surgery and pathology. The book is a compendium of surgical anatomical material that will be necessary for the library of every surgeon, pathologist, and cardiologist who treats acquired and congenital heart disease."

In a forward by Dr. **David C. Sabiston, Jr.,** chairman of the Department of Surgery at Duke University, he writes **"Surgical Anatomy of the Heart** provides the reader with an entirely new experience in combining anatomical and physiological concepts through expertly selected color plates of the specimens, each with accompanying labelled diagram and narrative."

Dr. Sabiston also admires the attractive arrangements of the text and unique illustrations. "For these reasons, this monograph will predictably become an essential feature in the libraries of cardiac surgeons and cardiologists alike. Sabiston says the "authors deserve great admiration and praise for the painstaking way in which they have produced this book, and equally they can be assured that this work will be enthusiastically received and will long endure as a landmark in the field."

Humane Medicine

By Dr. John Parker
Editor's Note: Dr. Parker presented this talk at an AOA meeting

Humane medicine in my view has three characteristics: it is effective, compassionate and accessible. The conquest of pernicious anemia, the notion of vitamins, the discovery of general anesthesia, the isolation and production of insulin and other hormones, the synthesis of antibiotics, and the concept of immunization are all examples of how medicine became more humane because of greater effectiveness. One doesn't have to talk about humane medicine to see the advantages of medical research: it makes good economic sense. A couple of doses of Sabin vaccine are cheaper than life in a wheelchair or in an iron lung.

In addition to being effective, humane medicine ought to be delivered in a compassionate and thoughtful manner. I hardly need to dwell on this.

Humane medicine is affordable and accessible medicine. Accessible to all citizens. Not everyone would agree with that. For example, I saw a patient in consultation, sent by a physician 160 miles from Chapel Hill. This elderly, frail woman had a hematologic malignancy for which she had been receiving exemplary care and was in a good remission. The referral notes indicated a careful and enlightened management plan. Why did he send her here, so far away? The reason was not clear from the materials that accompanied her. When I called the physician he said, with no embarassment, that her insurance benefits had run out and that she was behind in her payments to his office. He later wrote me that he had intended for this woman to be seen in the "free clinic" in Chapel Hill. When the money turned off he turned off.

This story reflects a reality that is counter to all the ideals I had about the practice of medicine when I decided to become a doctor. The case I would like to make is that Medicine's ineffectiveness in dealing with the problem of accessibility of medical care for all people is not only inhumane, but it has created a political and economic climate that will prevent most of us from ever attaining the kind of independent professional life that doctors in this country have traditionaly sought.

Twenty years ago President Johnson signed into law a program to provide comprehensive medical care for all Americans over the age of 65, known as Medicare, plus a federal program of financial assistance to the states for medical care of the poor, called Medicaid. This was a humane program, and it was accepted unenthusiastically by Organized Medicine. It was thought at the time that Federal outlays for Medicare would amount to 8.8

billion by 1990. What happened was an extraordinary increase in medical care costs, so that the 8.8 billion visualized for 1990 was achieved in 1972.

In fiscal 1983 the cost of medicare was 60 billion. Between 1967 and 1983 Medicare and Medicaid costs increased 17-fold. During those years of rapid growth, reimbursement to hospitals and doctors was on a "cost plus" basis. For a while no one questioned the justification for the large cost increases, and the previously skeptical Medical establishment realized that Medicare was the biggest bonanza it had ever received.

But by the last part of the 1970's increasing pressures for cost containment began to come from three sources: employers paying for expensive fringe benefits, health insurance agencies, and the Federal government.

An effort at cost control had been started in the early 1970s by the medical community. Groups called PSROs—Professional Standard Review Organizations—composed entirely of physicians, contracted with the federal government to review and establish norms of health care. Physicians alone, it was said, are the only people qualified to monitor the appropriateness of health expenses. But the PSRO program did not make much of an impact, and it became clear that the pressures for cost containment were so great that some forces outside the medical profession had to become involved.

What has been done, and what is being done to address the rising costs can be divided into two broad categories: First there are prepayment plans, that seek to provide physicians with an incentive to practice economical medicine. By this I mean Health Maintenance Organizations and reimbursement on the DRG principle. Under these plans physicians are rewarded for utilizing few resources and penalized for overexpenditures. The second development that has come about as a result of the new cost consciousness is the advent into the economy of investor-owned companies that aim to provide health care at a profit. Their advocates argue that the traditional methods of business will result in the delivery of the best product at the lowest cost. In my view these approaches to health care will pose serious challenges to the traditional ethical foundations of our behavior towards patients.

Several things impinge on the current cost consciousness. One is the question, "How much should we be spending on health and medical care?" There seems to be a great deal of alarm about the fact that in this year health care costs will amount to 10% of the Gross National Products. Is that bad? This is a question each generation must answer for itself. And there are priorities. For example, we have decided that the interests of the tobacco industry deserve a certain priority, nonwithstanding the adverse effects of tobacco on health, and that the industry should be supported and not prohibitively taxed. We do not have strictly enforced speeding rules, and the campaign to mandate the use of seat belts or air bags meet resistance, despite the documented success of a 55 MPH speed limit and seat restraints in reducing fatal highway accidents. Clearly health isn't everything. To those who argue that health costs ought to rise in order to cover the increasing fraction of our population that is elderly, some have replied that health care of old people is not good for the economy. Rather than spending government resources on the care of individuals who have ceased to contribute to the productive workforce we should be diverting funds into the private sector, which will create new jobs. We should also spend a lot of our resources on national defense. Each society establishes its own values.

Another factor that impinges on cost consciousness is wasteful spending. Always when even minor controls have been imposed, for example, requiring second opinions before certain procedures, there have been reductions in expenditures. There has been a lot of fat in the system, because for many years we as a profession were not trained to think in terms of costs.

I want now to discuss the pressures that each of the current cost containment movements are going to put on you and me as we practice medicine in the remaining years of this century. Not long ago I had dinner with a

physician in private practice who told me that one of his partners was going to retire early because of the new climate of cost containment. The doctor we were discussing works at a hospital where the administrators fiercely watch the DRG ledgers. He was disciplined on several occasions for hospitalizing his patients too long. He was notified that his style of practice imposed an economic burden on the hospital. And all of these messages came, not from fellow physicians, who might understand the extenuating circumstances, but from hospital administrators. The problem was that this physician takes care of cancer patients, whose difficulties with infections and side-effects of therapy are not well-recognized by the DRG system. His standards for patient care are being dictated by the cost-containment people. He is tired of the daily conflicts he must face as he balances off his perceived duty to patients against the very real prospect of losing hospital privileges.

An even more difficult set of ethical dilemmas is posed by the advent of the private sector into health care. Everyone should read Dr. Relman's famous essay in the New England Journal in 1980 called "The New Medical Industrial Complex". Enterprising groups of physicians, hospital administrators, and manufacturers of hospital supplies have realized that health care is a recession-proof industry: there will always be sick people, and there will always, they bet, be a lot of sick people who will have the means to pay their bills. So in recent years private entrepreneurs have entered the health care business. Recognizing the flexibility of large organizations and the economics that can be achieved through standard administrative practices health care companies have prospered. Now 11% of America's community hospitals and 66% of all nursing homes are in the corporate domain. Stocks of companies like Hospital Corporation of America and Humana are doing well. One third of every health care dollar spent in America in the corporate sector.

And merges are taking place. In March, 1985 it was announced that Hospital Corporation of America, the nation's largest hospital chain, is merging with American Hospital Supply, which controls ¼ of the hospital supply market in the United States.

...Humane Medicine ought to be delivered in a compassionate and thoughtful manner.

Whom do you suppose these corporate interests depend upon to make decisions that will result in the utilization of their products? The answer is: doctors. The dilemmas this can cause are illustrated by an an anecdote in Stanley Wohl's recent book:

"A competent internist rents office space in a Houston medical building associated with a nearby chain hospital. The understanding was that the doctor would refer his patients to the company hospital and make use of the company's facilities for medical tests and X-rays. The arrangement seemed beneficial all around. After all, there are things the company does better than the doctor, like renting, billing, and managing expensive medical equipment. But two years later the physician was confronted with a punitive raise in rent. He had been made to understand that the corporate executives had not been pleased with the small number of patients he had admitted to the hospital—a physician's badge of honor in any other circumstance—or with the small volume of tests he had ordered. He was encouraged to leave."

The fact is that medical practices vary in terms of what is regarded standard procedure. A chart taken from Wennberg & Gittlesohn's 1982 article in Scientific American shows data from a survey of medical practices in 33 comparable health care catchment areas in New England. The study focussed on illnesses that are taken care of in community hospitals. Some procedures, like appendectomies and herniorrhapies, are done at about the same rate in the communities under study. The differences in practice from region to region are not statistically significant. Apparently, the indications for these operations are about the same in the communities under study. But hysterectomies and tonsillectomies are another story. These are done at widely different rates from region to region, with a high standard deviation. The authors show that the reason for this is that the indications for hysterectomy and tonsillectomy are more controversial. The demand for these operations varies not with the incidence of tonsillar or uterine disease but with the distribution of ENT specialists and gynecologists. The subtitle of their paper summarizes the conclusion: "The amount and cost of hospital treatment in a community have more to do with the number of physicians there, their medical specialties, and the procedures they prefer than with the health of the residents."

In a recent publication Wennburg has shown that the majority of hospitalizations are not for operations like hernia repair or appendectomy. Most are for indications about which there is some continued debate, like coronary artery bypass grafts, knee surgery, and inpatient care of patients with

certain medical diseases. Hospitalization patterns for these conditions in different areas are dictated not by the needs of patients but by the interests of physicians.

What the private corporations hope to capitalize on is the performance of reimbursible procedures. They will seek out and employ physicians who elect to perform such services. This kind of psychology is represented in a small way by a conversation I had with one of our former house offices who told me his group was obliged to perform 15 treadmil tests a week on their office patients in order to pay for their newly-acquired stress-test apparatus.

The corporate health care providers have shrewdly taken advantage of the new surplus of physicians, many of whom need work in order to pay the accumulated costs of their training. An oncologist recently told me that in a group practice he joined, chemotherapy was routinely given to patients with poorly responsive cancers because, as he said, "If we don't do it, our competitors down the road will."

A final pressure is the malpractice epidemic. A New York Times article from February, 1985, was entitled "The Litigation Epidemic". The graph published there shows that since 1980 malpractice insurance companies have sustained losses that exceeded revenues. One statistic tells a great deal: To purchase $1 million dollars of malpractice coverage for one year a neurosurgeon in Long Island must pay $101,000 dollars. The nefarious influences of this trend have gone beyond the ordering of extra X-rays and tests. Many physicians now discourage the performance of autopsies lest something be found that might provide grounds for litigation.

An issue of importance to me is how the medically indigent will be served. There are poor people in this prosperous economy. About 25 million Americans have no health insurance at all, and another 30-40 million have marginal coverage. Thirty-two percent of the residents of Sampson County, N.C. have no health insurance. Cost containment measures in the Medicare and Medicaid programs have made it difficult for some of my poor and elderly patients to afford good care in their own communities. The private corporations feel no obligation to the poor. Their obligation is to their stockholders. If a hospital in a region is unprofitable, it will be shut down in the same way that steel mills or automobile factories are closed when they are perceived as economic burdens.

A sick person doesn't necessarily want to be taken care of by the lowest bidder.

I have never thought of medical care as a commodity that can be marketed and bargained for like beer and Texas crude. A sick person doesn't necessarily want to be taken care of by the lowest bidder. There is no connection between the payment of a medical bill and the outcome of care. An unsuccessful visit to the doctor costs just as much as a successful one. People are not clever and astute in negotiating their medical financial affairs when they are ill. But the reality is that for the next few years our services will be discussed by legislators and administrators in the harshest economic terms.

To sum up, I predict that the new trends in medical economics are creating some ethical conflicts for physicians. On the one hand we are admonished and provided incentives to practice economically, maybe even to cut corners. On the other hand, doctors who work for health companies may be rewarded for overutilizing services and doing procedures. The threat of malpractice litigation will not go away soon.

My advice in dealing with these pressures is to make sure that your professional decisions are dictated simply by what you think is best for your patients. Sometimes that may take courage. The second thing I would urge is that you participate in, support, and encourage scientific research: basic research and clinical research. Because it is only through new knowledge and the disciplined testing of current practices that our decisions about patient care can be enlightened. Finally, I hope that physicians in this country will come to see themselves as *servants of the public*. Unless we can convince people that we have this view, I think the malpractice risks will rise and political forces will work to our disadvantage. I am afraid that if we are not seen as a caring and cost-continuous profession our lives will become increasingly legislated by forces outside medicine, and our power to make decisions and to gather knowledge in our patients' interest will be increasingly constrained.

For many years after I came here my heart used to be warmed as I walked by a sign that stood near the helecopter pad. The sign said, "North Carolina Memorial Hospital—operated for and by the people of North Carolina". It meant a lot to me that I worked at a place where all comers would be taken care of, and that somehow we would work out the financial details. Three or four years ago the sign was taken down, and for me that was a sad day. The sign didn't say, "the insured people" or "the people who can afford it". I hope the new economic realities don't pose such a threat to us here in Chapel Hill that we have to abandon the principles so eloquently expressed by that simple message. Perhaps as an affirmation of our commitment to humane medicine we should restore this sign, just as it was, made of wood, and requiring a new coat of paint every year.

X-Ray Crystallography

Most of us think about X-rays—when we think about X-rays at all—as a means to tell whether a bone is broken. For Dr. Charles W. Carter Jr., associate professor of biochemistry and anatomy at the UNC-CH School of Medicine, X-rays mean much more.

Pictures generated by UNC's X-ray crystallography facility allow him and fellow researchers to see how atoms are arranged in protein molecules. The facility is one of three in the country.

"X-ray crystallography is the highest quality imaging technique available for studying molecules," Carter said. "It means that we can see with incredible precision what life at the molecular level really looks like."

A high-intensity, rotating anode X-ray generator sends X-rays through a small crystal. The diffraction pattern is collected using a multiwire area detector and analyzed by a computer, which then provides a picture of the crystal's molecular structure. Since biological specimens deteriorate rapidly, it is critical that this be done quickly; the area detector in the UNC facility makes both speed and accuracy possible.

According to Carter, "This new device works like an 'electronic film,' but is about 50 times faster than photographic film."

Carter's work involves tryptophan, one of the 20 amino acids that make up proteins in the body, and the enzyme responsible for inserting tryptophan correctly into protein sequences.

Why try to figure out what happens at the molecular level?

"If we can understand genetic translation at the molecular level, we may be able to modify the process," Carter says. While that kind of modification is currently "science fiction," Carter believes that the time for making practical use of molecular protein research is "not too far off. An important missing piece is an accurate picture of what synthetases (enzymes that help ensure the correct genetic encoding of proteins) look like."

Carter's research may, utlimately, have a bearing on cancer and the process by carcinogens are activated in the body. It might yield clues about why the body's cells activate the precarcinogenic activity of certain environmental factors.

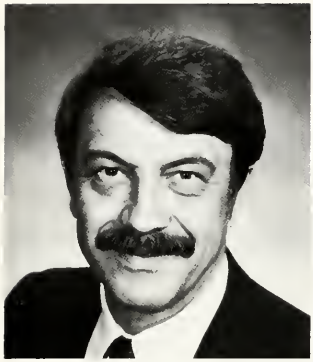
But, while practical applications are important, they are not paramount in Carter's work.

"I'm interested in the whys, not what you can do about it," Carter says. "It's important to me to study a system that's central to the genetic apparatus: how proteins are made.

"That process probably predated the existence of cells. My interest lies in how it evolved, came into existence—and in the origin of life. By looking at structures, I hope we'll find clues to how it all started."

Carter's work has been funded by a $299,000 grant from the National Institutes of Health, with additional funding from the UNC-CH School of Medicine.

Faculty Notes



Dr. Robert A. Briggaman, professor of dermatology at the University of North Carolina at Chapel Hill, has been named Professor of the Year by the American Academy of Dermatology. He was selected for the honor by a special committee because of his "significant contributions" to research in the field.

Dr. Briggaman is "a superb clinician, an accomplished dermatopathologist, a great teacher and a highly imaginative and consistently productive investigator," said Dr. Clayton Wheeler, dermatology department chairman at the UNC-CH School of Medicine and outgoing president of the American Academy of Dermatology.

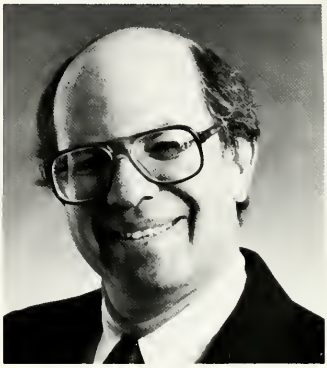
As Professor of the Year, Briggaman delivered a major lecture at the academy's 44th annual meeting in Las Vegas. The lecture focused on one of Briggaman's primary research interests: the ways in which inflammatory cells move from one layer of skin to another and cause various diseases. He suggested that this movement may be important in helping to explain the development of skin cancers.

A native of Hartford, Conn., Briggaman is a graduate of the New York University School of Medicine. He completed his residency training in dermatology at North Carolina Memorial Hospital. He has been a member of the hospital's medical staff and a faculty member in the UNC-CH Department of Dermatology since 1967.

Dr. David S. Janowsky is the new chair of the Department of Psychiatry and director of the Center for Alcohol Studies in the School of Medicine.

Dr. Janowsky comes to Chapel Hill from the University of California at San Francisco where he has been a professor since 1976.

He is interested in biologic and interpersonal-behavioral psychiatry and the interaction between neurobiology and behavior.



Dr. David S. Janowsky

Dr. Kunihiko Suzuki is the new director of the Biological Sciences Research Center and professor of neurology and psychiatry.

Suzuki has been a professor of neurology and pediatrics and neuroscience at Albert Einstein College of Medicine and the University of Pennsylvania School of Medicine. Dr. Suzuki is involved in studies of certain inborn errors of metabolism which result in severe neurological and intellectual disorders in children.

Dr. Kunihiko Suzuki

Dr. Mary Jane Gray has been appointed as new assistant Dean for Student Affairs.

Dr. Gray has been a member of the faculty of the School of Medicine since 1977 and is presently clinical professor of obstetrics and gynecology.

Dr. Floyd Denny, Alumni Distinguished Professor of pediatrics, was honored with a Distinguished Service Award from Vanderbilt University.

Dr. Cecil G. Sheps, Taylor Grandy Distinguished Professor of social medicine, received an honorary doctor of science degree from the University of Manitoba in Winnipeg, Canada.

Dr. Edward Shahady, professor in the department of Family Medicine in the School of Medicine stepped down as chairman in February.

He had served as chairman since 1976 when he joined the faculty. He is interested in devoting more time to teaching, patient care and continuing his research in sports medicine.

Dr. John J. Frey III, professor of family medicine, is serving as acting chairman until a replacement is named.

Dr. Edward Shahady, professor of family medicine, received the 1985 Distinguished Alumnus award from Wheeling College, Wheeling, West Virginia.

Dr. Frank C. Wilson, professor and chairman of the Division of Orthopaedics, was named chairman of the Residency Review Committee.

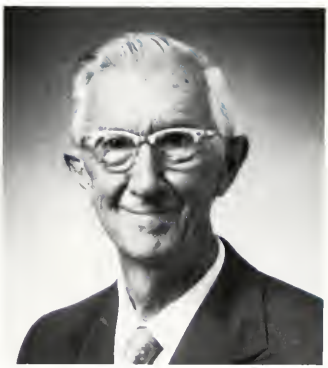
The review committee is the national accrediting body for graduate medical education programs including residencies and fellowships. Wilson was elected for a two-year term. He is past president of the Association of Orthopaedic Chairman.

Dr. Edward Shahady

Dr. Frank C. Wilson

The portrait of **Dr. Thomas W. Farmer,** Sarah Graham Kenan professor of neurology and medicine, was unveiled in a special ceremony in the fall.

Dr. Farmer, a distinguished neurologist, is the founder of neurology at the School of Medicine. He is the author of over 100 neurological publications including his pioneering textbook, **Pediatric Neurology,** now in its third edition.



A Look Back

Whitehead Society's Winter Gala

Class notes

Manning-Berryhill Club

Archie Barringer, C. Med '34, of Mt. Pleasant is enjoying his retirement after 46 years. "I am thoroughly enjoying a more relaxed way of life," he says.

Meyer H. Rolnick, C. Med '40, is living in Long Beach, Calif. He says he loves the life of leisure and is doing extensive world traveling.

J. Hicks Corey Jr., C. Med '45, lives in Chattanooga with his wife Elaine. He is assistant professor at Case Western. With three physicians in the family, Corey says he is "mighty proud."

Kirby T. Hart Jr., C. Med '45, of Petersburg, Va. is a pediatrician. He enjoys traveling, "goofing off" and teeing off.

Roger A. Smith, C. Med '45, is practicing neurology and neurosurgery in San Bernadino, Calif. He and his wife Elena have five children. He lists tennis, music (especially opera), history and theatre as his interests.

Daniel T. Young, C. Med '48, of Chapel Hill is a member of the national board and the executive committee of Physicians for Social Responsibility (PSR). The organization involves physicians in work to prevent nuclear holocaust. Young has travelled to Holland, Finland and Russia for PSR.

50s

J. L. Watters, C. Med '50, is the director of Cherry Hospital in Goldsboro. Prior to his appointment last fall he was director of the intermediate care facility at Cherry Hospital. Watters is a Charlotte native and currently lives in Raleigh. He is married to the former Elizabeth Raborg and they have five children.

Dr. A Everett James Jr.

A. Everett James Jr., M.D. '59, was recently elected to the administrative board of the Council of Academic Society. James is professor and chairman of the Department of Radiology and Radiological Sciences at Vanderbilt University School of Medicine.

60s

James F. Smith, M.D. '62, of West Palm Beach, Fla., is vice president of West Palm Beach Medical Society and is past president of Palm Beach County Obstetrics and Gynecology Society. His wife Anne is involved in volunteer duty and is president of the The Volunteer Center of the Palm Beaches. Smith says he is looking for a new partner in his Ob/Gyn practice.

David A. Rosin, HS'65, of Portsmouth, Va., is the Clinical Director of Adult Psychiatry at Virginia Center for Psychiatry in Norfolk. He is also medical director of the Pain Institute of Tidewater.

Sue Massey Kirkpatrick, M.D. '65, of Scotts Valley, Calif., practices gynecology in Santa Cruz County. She is married and has two children, Andrew and Edward. Kirkpatrick enjoys cross-country skiing, horse back riding and breeding rabbits.

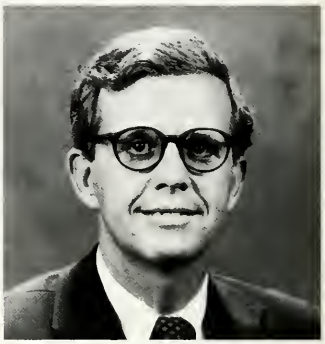
Marvin R. Goldstein, M.D. '65, of Scottsdale, Ariz. is specializing in cardiology. He is chief of critical care units at Scottsdale Memorial Hospital. Goldstein has four children and enjoys tennis, softball, traveling and scuba diving.

Craig R. Roberts, M.D. '65, is living in Phoenixville, Pa. with his wife Diana and their five children, Maria, Kari, Tony, Rachel and Josh. He is in private orthopedic surgery practice in Phoenixville where he is also a member of the board of health. On his days off he rides horses and works on his folks' farm.

M. Wayne Flye, M.D. '67, has recently assumed the position of professor of surgery and immunobiology and director of a multi-organ transplantation and immunobiology program. He was previously professor of surgery and immunobiology at Yale University. He and his wife Phyllis have two children, Chris who is 16 and Brandon who is 13.

Ali Jarrahi, HS '67, of Winston-Salem is chief of the section of psychiatry at Forsyth Memorial Hospital in Winston-Salem.

James D. Hundley, M.D. '67, an orthopaedic surgeon from Wilmington, is the new president of the North Carolina Orthopaedic Association (NCOA). He was installed in October, 1985. He has served as recording secretary, secretary-treasurer and president-elect of NCOA.



Dr. James D. Hundley

70s

Claude Earl Fox, M.D. '75, was recently appointed state health officer for the Alabama Department of Health. Fox and his wife Carolyn live in Montgomery, Ala.

Patrick G. Bray, M.D. '75, is currently the Dallas area medical director for Texas Instruments. During his free time, Bray enjoys playing the guitar, studying American History and playing basketball. He and his wife Bette have one son, Aaron.

Jim Peacock Jr., M.D. '75, of Winston-Salem, is an assistant professor of medicine and infectious diseases at Bowman Gray. He and his wife Patti have two sons, Jeffery Edward and Todd Phillip.

Joseph B. Philips III, M.D. '75, is the recipient of the Young Investigator Award of the Society of Critical Care Medicine for 1985. This award was given for his work titled "Characterization of the Hemodynamic Chronically Instrumented Piglets to Bolus Injections of Group B Streptococci." This work is currently supported by a grant from the Alabama Affiliate of the American Heart Association.

Cornelius F. Carthcart, M.D. '76, is serving a one-year term as chief-of-staff of Maria Parham Hospital in Henderson. Cathcart, a pediatrician, was elected by the 29 physicians on staff.

Ross D. Lynch, M.D. '76, was inducted as a fellow of the American Academy of Orthopaedic Surgeons during ceremonies of the group's 53rd annual meeting in New Orleans.

Dr. Louis A. Nassef

Louis A. Nassef, M.D. '76, is a new member of the Department of Cardiovascular Medicine at Geisinger Medical Center. Prior to joining the staff of Geisinger Clinic, Nassef served as a fellow in cardiovascular diseases at the Mayo Clinic.

Alton Ray Anderson, M.D. '77, is serving on the Board of Education of the Weldon City School District. He is married to the former Terry Lowe of Weldon and they have two children Tori Lore and Alton Ray Jr.

Sandra W. Gordon, M.D. '78, of Bloomfield, Conn. has joined the general internal medicine group of the Valley Medical Group in Canton, Conn., a town outside of Hartford. She and her husband Gene have two sons, Neil 8 and Andrew 4.

Frances Owl-Smith, a rising fourth year student, received the 1986 Ciba-Geigy award for outstanding community service. She received the award from Dr. Gregory Strayhorn, assistant dean for academic affairs, left, and Dr. Robin Campbell, hospital sales representative for Ciba-Geigy.

Ray Mitchell, president of class of '77, enjoyed last year's alumni weekend. This year's alumni weekend is set for October 31-November 1. Make plans to attend.

80s

Brian C. Jones, M.D. '80, was awarded a fellowship as a clinician scientist of the American Heart Association to support research in quantitative assessment of myocardial perfusion at the University of Florida where he is on the staff in the Division of Cardiology.

Roy Whitaker Jr., M.D. '81, completed an ophthalmology residency at the University of Missouri-Columbia. He is currently doing a fellowship in glaucoma at Massachusetts Eye & Ear Infirmary at Howe Laboratory, Harvard Medical School. He and wife Von are the parents of a new son, Roy Whitaker III.

Nanetta B. Lowe-Roache, M.D. '81, is chief resident in general surgery at Washington Hospital Center. She and her husband, Winston, announce the birth of their first child Reuben Anthony. They reside in Takoma Park, Md.

Carol Deniese Rogers Reid, M.D. '81, of North Wilkesboro, is in private practice in anesthesia at Wilkes General Hospital where she is also chief of anesthesia. She and her husband announce the newest member of the family, Catherine Rogers Reid. Her godparents are Patricia Dockery Weavil, M.D. '81, and her husband Ricky.

Paulette Ingram, M.D. '82, has joined the staff at Halifax Memorial Hospital and Roanoke Amaranth Community Health Group. A native of Raleigh, Ingram has a special interest in adolescent pediatrics and plans to have an active role in educating youth in Northampton County, which will be her primary base.

Barbie King, M.D. '82, is in practice with the Bakersville Community Medical Clinic in Bakersville. She lives in Spruce Pines.

Barbara Lowe, M.D. '82, is now practicing internal medicine in Dunn. A native of Greensboro, Lowe completed her three-year residency program in internal medicine at New Hanover Medical Hospital in Wilmington, and was awarded the E. Thomas Marshburn, M.D. award for outstanding performance. In her spare time, she enjoys fishing, tennis and refinishing antiques.

Marcus E. Randall, M.D. '82, and his wife Brabsie are proud to announce the birth of their child, Marcus Kenneth. Mark, Brabsie and Ken live in Charlottesville, Va., where Mark is chief resident in radiation oncology and a clinical fellow of the American Cancer Society at the University of Virginia Medical Center.

Debbie Taylor, M.D. '83, says it's hard to believe her residency is almost over. She has decided on infectious disease as a subspecialty. During her free time she recently travelled to London for a vacation. She said the weather was great and she had a "super time."

Barabara B. Fawcett, M.D. '84, is currently working in a family practice clinic and will continue her residency training in family medicine.

Deaths

Charles Ferguson, C. Med '28
Milton K. Freiberg, C. Med '34
Ann C. Mortell, M.D. '71
William O. Johnson, C. Med '34
A. Hewitt Rose Jr., C. Med '48
Samuel B. Williard, C. Med '39
Lester A. Crowell Jr., C. Med '28

Curtis Lee Sutton, M.D.'86, of Kinston, center, was awarded the Commonwealth Fund Fellowship this spring. The fellowship is designed to help academically gifted minority medical students prepare for careers in academic medicine and biomedical research. Pictured with him are Dr. Gregory Strayhorn, '78, assistant dean of academic affairs and Dr. Stuart Bondurant, dean of The Medical School.

Calendar

September

1	Co-founders	UNC vs Citadel

October

31	Fall Alumni Weekend	Visiting Committee

November

1	Family Football Weekend	UNC vs Maryland

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Alumni Fall Weekend
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Vol. 32 November 1986

University of
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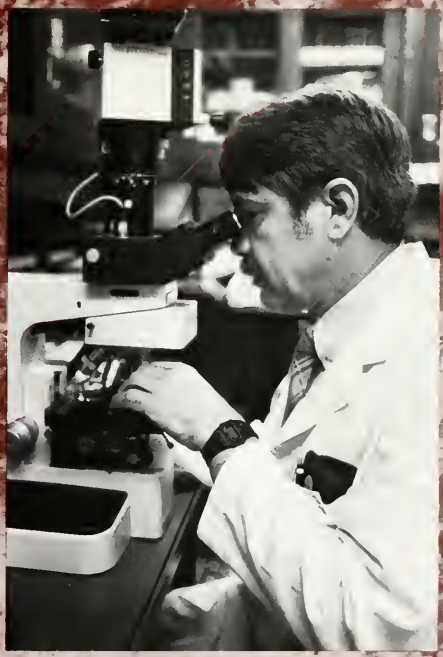
School of Medicine

medical alumni BULLETIN



Electron Micrograph of Human Skin

University of North Carolina
NOV 17 Rec'd
Health Sciences Library

The new Magnetic Resonance Imaging facility
See story, page 8.

Front cover: Dr. Bob Briggaman
See story, page 2.

medical alumni BULLETIN

ADVISORY BOARD
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Behind the lines

The recent Fall Family Weekend for alumni and their families was a big success, mixing alumni association business meetings, continuing education programs and fun—Tar Heel style. A number of alumni families topped off the weekend by attending the UNC-Maryland football game in Kenan Stadium and a Blue-White basketball game.

This year's Norma Berryhill Distinguished Lecture and convocation for new members of the medical faculty was a fine event. The lecturer, G. Philip Manire, Ph.D. Kenan Professor of Microbiology and Immunology, spoke on "Carolina: A Research University—Genesis and Consequences." Dean Stuart Bondurant, M.D., welcomed 54 new faculty members to the medical school family.

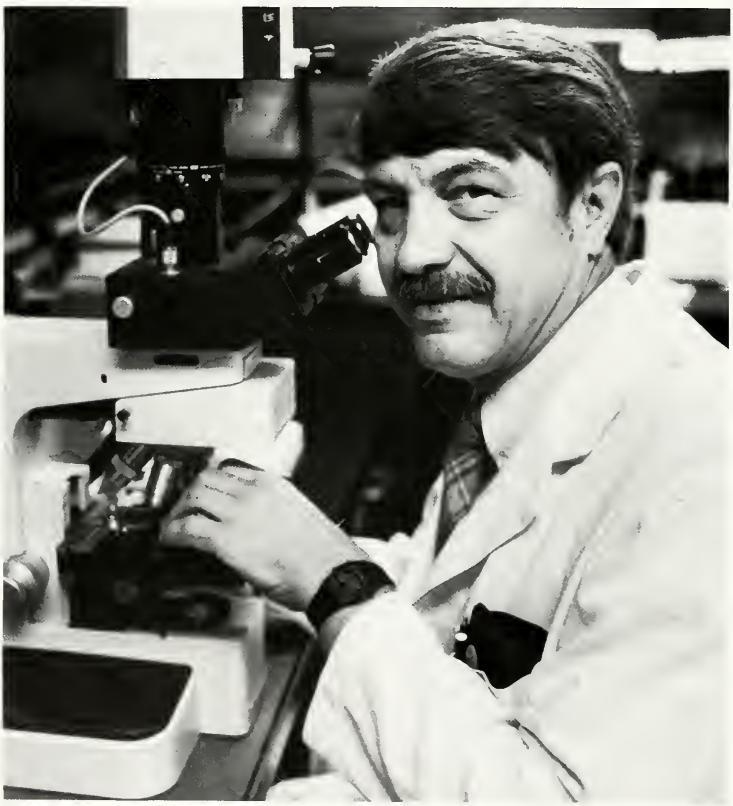
Noel McDevitt, M.D. '64, an Asheville native who practices in Pinehurst, was installed last spring as president of the Medical Alumni Association.

A group of medical students with a special interest in research has published a magazine called *Fax*, which means, in Latin, a torch that lights the way. The magazine is lively and attractive and has been well-received by students and faculty alike. Alumni who would like to have a copy should call or write Beverly Stutts in the alumni office. The Medical Alumni Association supported this project.

Dr. Noel McDevitt, M.D. '64, Medical Alumni Association president, and his wife Pat, chat with Mary Susan K. Fulghum, M.D. '71

Bob Briggaman

"He's a great teacher and researcher."
—Clayton Wheeler
Chairman, Dermatology



When a colleague was asked to describe Dr. Robert Briggaman, he paused slightly and said, "Bob's a doer, highly imaginative and consistently productive. He's a great teacher and researcher."

Briggaman, professor of dermatology, sat in his office on a busy afternoon and explained the research that has earned him international respect in the field of dermatology.

He has been studying epidermal-dermal junction since the early 1970s. It is a complex, integrated structure, the bio-chemical components of which are just beginning to be discovered, Briggaman said.

He explained that significant progress has been made in the last five years in recognizing components of the junction, including collagenous macromolecules of three types, and basement membrane proteins such as laminin, fibronectin, nidogen and heparan sulfate proteoglycan entacin.

Briggaman looks at ways in which inflammatory cells penetrate the junction and move into the epidermis. He finds the epidermal-dermal junction studies "very rewarding, especially the biochemical compositions."

Because of his innovative and outstanding research, Briggaman last year received the Professor of the Year Award from the American Academy of Dermatology and was chosen to deliver the Marion B. Sulzberger Memorial Lecture at the AAD convention in Las Vegas.

Dr. Clayton Wheeler, chairman of the dermatology department and immediate past president of the AAD, is proud of his colleague's award and insists, "I had nothing to do with it. In fact, I didn't have the foggiest notion that he was even being nominated. There was a selection committee, no good old boy thing. I was pleased that he got it, doubly pleased that I was president at the time.

"It is quite a prestigious award," Wheeler continued. "It is given to a person who has done investigative work in relation to

patient care and clinical work. It is given to someone who is not an old gray head. Dr. Briggaman is a first-rate investigator, an international authority."

Briggaman is quick to acknowledge the excellent research of his colleagues in the department.

"We are working with a special model system to study skin problems which we believe to be very useful," he said.

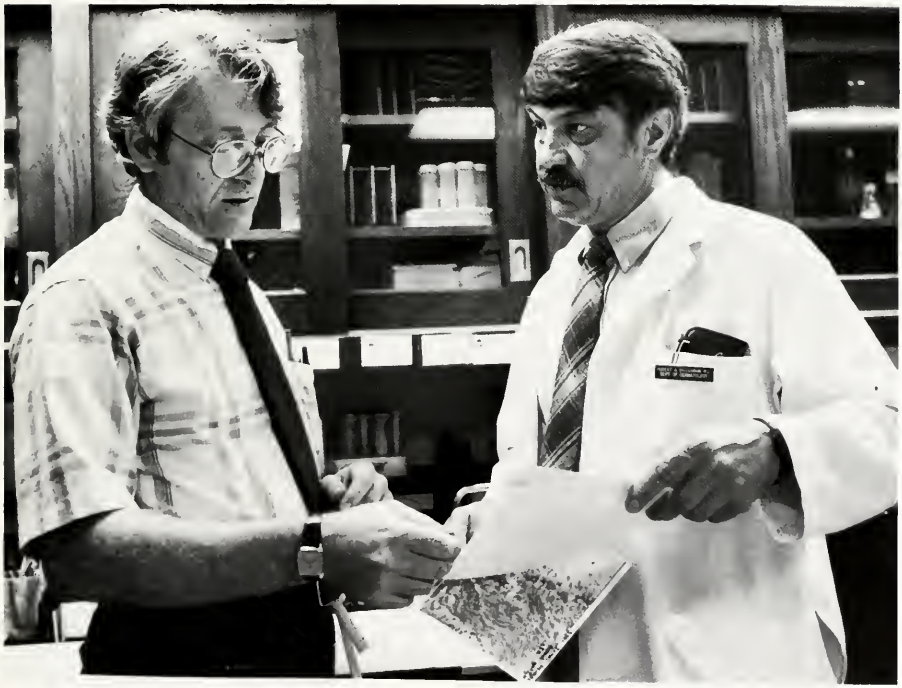
A special colony of nude mice provided strong evidence to researchers that psoriasis is caused by something in the skin itself rather than by other body systems. The mice have no thymus gland and cannot reject foreign tissue. By grafting skin from psoriasis patients onto the mice, Briggaman has been able to show that the grafted skin maintains many of the same features as psoriasis.

The mouse colony has also been useful for studying new drugs which may be used to fight psoriasis.

Because of this research, Briggaman was one of the two recipients of the Taub International Memorial Award from the Baylor College of Medicine.

When asked why he chose the dermatology field, Briggaman sat back in his chair, crossed his legs and pondered.

"Frankly, it has a lot to do with the people you meet along the way. Role models have a lot to do with it. Clayton Wheeler has been quite an influence on me. He is a superb teacher, practitioner and he delivers a very high level of patient care."



Dr. Ray Gammon and Briggaman discuss project.

Distinguished Service, Faculty Awards

Dr. Fred W. Ellis

Dr. Charles L. Herring

Dr. Robert Leo Nye

Sanford and Byah Doxey

Dr. Margaret C. Swanton

Dr. Clayton Wheeler (left) was honored with the 1986 Distinguished Faculty Award. It was presented by Dr. Luther Kelly.

The School of Medicine of the University of North Carolina at Chapel Hill honord seven individuals in April for their contributions to medical education and health care.

The Distinguished Faculty Award and Distinguished Service Awards were presented at the annual banquet of the Medical Alumni Association.

The Medical Alumni Association presented its Distinguished Faculty Award to **Dr.Clayton Wheeler,** chairman and professor of the Department of Dermatology.

The Distinguished Faculty Award was established in 1978 for excellence in teaching, contributions to medicine in the state, leadership in continuing education for practicing physicians and accomplishments in improving communications between faculty and alumni and people of the state, according to Dr. Stuart Bondurant, dean of the School of Medicine.

Distinguished Service Awards, the School of Medicine's highest honors, were presented to: **Dr. Fred W. Ellis,** professor emeritus of pharmacology at UNC-CH; **Dr. Charles L. Herring,** internal medicine practitioner in Kinston; **Dr. Robert Leo Ney,** former chairman and professor of medicine at UNC-CH (now deceased); **Sanford** and **Byah Doxey,** Fayetteville benefactors; and **Dr. Margaret C. Swanton,** professor emeritus of pathology at UNC-CH, who now lives in Clinton.

The Distinguished Service awards were established in 1955 to recognize individuals whose outstanding careers and important contributions "have enhanced the fullness of life in relation to the program of the University and its medical school," said Bondurant.

Dean's page

The legislature, during its short session this summer, failed to resolve the medical liability crisis. However, debate over two bills recommended by the Legislative Commission on Medical Malpractice did help to bring the issue into sharper focus and, I believe, to make both legislators and the public more aware of the difficulties we face. I testified in support of both of those bills on behalf of the four deans of North Carolina's medical schools.

While this is not the place to expand upon the problems and potential solutions of the liability crisis, I do believe it is worth noting that a seldom recognized and severe consequence of the crisis is a pervasive effect upon medical education. It begins with a negative influence upon the applicants to medical school and includes unhealthy influences upon the content and process of the education of future physicians with very substantial influences upon the choice and content of specialty practice.

There was another theme in the testimony which I would like to expand here. Dr. Floyd Denny, past chairman of our Department of Pediatrics, testified in support of the bill to limit physician liability in the use of vaccines. He gave a moving and dramatic recital of the contrast between his early experiences in pediatric wards filled with patients with diphtheria, polio, tetanus, and other ravaging diseases of childhood which have been abolished or markedly reduced by vaccines.

In later testimony, Dr. David Tayloe, Sr. said that he has a new partner in the practice of pediatrics who has not seen a case of measles, so effective is the vaccine program. The buried theme in all this is that medicine has come a long way indeed in reducing the risk of "undesired outcomes." It happened that the decade of the 1880's was a time of powerful initiative in American medicine, so that this is an interesting time to reflect on the advances of the past century.

Next year the National Institutes of Health will celebrate its 100th anniversary and many of the senior specialty organizations in medicine, those in Dermatology, Surgery, Internal Medicine, and Orthopedics, for example, have recently celebrated their centennials. The Association of American Physicians was founded in 1886. The work presented to that organization over the past century is a fair sample of the dramatic progress.

The ninth paper on the first program of the Association of American Physicians in 1886 was the first report in medical history of the entity of ruptured appendix. In the 1890's, Dr. Theobald Smith reported for the first time ever the discovery that insects can serve as vectors of disease. In 1912, Dr. James B. Herrick recognized for the first time ever the occurrence of myocardial infarction. In 1922, Banting, Best, McLeod and others reported for the first time the discovery of insulin. In 1926, Minot and Murphy reported the use of liver to treat pernicious anemia. In the 1930's, E.C. Kendall reported the crystallization of thyroxin and cortisol. In the 50's, 60's and 70's, the familiar advances in Infectious Disease, Endocrinology, Cardiology, and Oncology increasingly based upon the techniques of molecular biology have logorithmically extended the power of these advances. It seems to me that this recital of discoveries is a dramatic testimony to the fact that most of what we know and use in medicine we have learned quite recently. But our ignorance still far exceeds our knowledge and I expect that the next century will see even more powerful advances including knowledge which will help us to reduce the unintended adverse outcomes which are the basis for a good bit of the current liability problem. In the meantime, it is urgent that the system for resolving claims of malpractice be improved because the excesses and inequities of the system are now compromising health care for most of our people.

"The House With A Heart"

Undergoing strange and sometimes painful medical procedures can be frightening for a child—especially when there are no familiar faces around.

And sitting at home wondering what's going on is no easier for parents who can't afford to travel to and from a distant hospital.

Yet, when children require treatment in hospitals far away from home, many families find themselves in just that predicament.

"A Ronald McDonald House can help ease that traumatic period for them," said Dr. Thomas Boat, professor and chairman of pediatrics at the School of Medicine.

"It's a place where parents and other family members of hospitalized children can stay at a nominal cost. And children can stay there with their families if they just need to come to the hospital for outpatient treatment."

Boat is a member of the board of directors of the non-profit organization that is spearheading the drive to bring a Ronald McDonald House to Chapel Hill.

The board includes parents of children who have been patients at the hospital, medical school and hospital staff, members of local service organizations and representatives of the McDonald's Corporation.

McDonald's restaurant owners in North Carolina are giving $200,000 to help with construction of the house and have pledged their continuing support. Additional advice and assistance are being provided by the international McDonald's restaurant chain.

There are about 100 Ronald McDonald houses throughout the United States and in several countries. Boat says one definitely is needed in Chapel Hill.

"The hospital here belongs to the people of North Carolina," he said. "We take care of the patients from every corner of the state.

"The child care program in medicine at N.C. Memorial Hospital is one of the foremost in the Southeast. We have outstanding programs in childhood arthritis, congenital heart disease, neurologic disorders, gastrointestinal disorders, pulmonary disease and endocrine problems like short stature.

"Our programs in cancer

treatment, child abuse, kidney diseases, genetic and metabolic diseases, neonatal problems, development and behavioral disorders and pediatric surgery are among the best.

"In fact, several of these services are drawing people from all over the eastern part of the United States," he said. A Ronald McDonald House makes it affordable and convenient for parents coming these distances to spend days at a time with their child who is in the hospital.

That's very important for sick children, Boat said. For example, newborns suffering prematurity and its consequences need close parent contact. "We know that the period after birth and the interactions that go on during that time are important in the development of the parent-child relationship.

"If parents can stay several days at a time, the attachment formed is probably more lasting than if they intermittently drive into town, stay for a couple of hours and then leave again.

"But currently, if parents decide to stay with their child at the hospital, they must endure a lot of discomfort," Boat said. "They have the option of sleeping on a lounge chair in the child's room. However, I've found them sleeping in waiting areas, or even stretched out on the floor in conference rooms."

They eventually become less patient with their children in that kind of situation, Boat said. A Ronald McDonald House, where they can obtain emotional support as well as shelter, will be an ideal place for them to relax.

"It's a natural gathering site for parents. People with common interests and common needs can get together there, share their experiences and support each other. Parents become frustrated if their children aren't responding as quickly as they had hoped, but at the house they can see that they are not alone."

The family's reaction reflects on how a child behaves in response to the hospitalization, Boat said. "If the parents feel better, the kids feel better. They may even respond better to treatment and get out of the hospital more rapidly.

"I think a Ronald McDonald House is an essential part of an overall child care program—it's not just frosting. With it, Chapel Hill will be an even more attractive and desirable place to take care of sick children."

Building A "Home Away From Home"

Plans for Chaple Hill's Ronald McDonald House call for a two-story structure with 20 bedrooms, each including a private bathroom. Four of the bedrooms will accommodate handicapped residents, as will an elevator connecting the two floors.

The living room, overlooking a patio and playground, will have a fireplace and several small communal areas for television viewing, studying or visiting.

The house will have two playrooms equipped with games for children and teen-agers. The kitchen, furnished with extra appliances, will be spacious enough to permit several families to prepare meals at the same time.

Office space, a laundry room and a vending area will be located in the main house. An adjoining resident manager's apartment will have a private entrance as well as one to the main building.

The house will be located on a 2.5-acre site near Finley Golf Course on Mason Farm Road. A shuttle service will transport residents the 1.5 miles between the hospital and the house.

A fund raising goal of $850,000 has been set to pay for construction of the house. Another $650,000 is needed for furnishings, landscaping and operating expenses for at least the first year.

Tax deductible contributions may be made by sending a check, payable to the Chapel Hill Ronald McDonald House, to P.O. Box 3367, Chapel Hill, N.C. 27515-3367.

The Tarhealer, a quarterly newsletter providing updates and information about the Chapel Hill Ronald McDonald House, may be obtained by writing to: Editor, The Tarhealer, Public Affairs Office, N.C. Memorial Hospital, Chapel Hill, N.C. 27514.

Magnetic Resonance Facility Dedicated

New facility at N.C. Memorial offers latest imaging technology

Patients and physicians across the state now have access to the latest in diagnostic imaging technology at the North Carolina Memorial Hospital.

The technology is available through the hospital's new Magnetic Resonance Imaging Facility (MRI), said Dr. Edward V. Staab, director of the facility, professor and associate chair of radiology at the School of Medicine.

"As one of the state's major referral centers, N.C. Memorial is pleased to be able to provide patients and referring physicians with this service," Staab said.

"MRI provides us with excellent images of anatomy and the ability to differentiate normal from abnormal tissue. In a number of areas, especially the central nervous system, it has proved superior to other imaging techniques."

Staab cited as examples MRI's superior capability to diagnose multiple sclerosis, evaluate difficult problems during pregnancy and to obtain scans of many bone and soft-tissue diseases.

MRI uses radio waves, a strong magnetic field and computers to generate cross-sectional images of the body. Because it uses no radiation, MRI offers some patients a safer alternative to X-ray examinations, including computed tomography (CT) scans.

The $5.1 million facility is located at the corner of Mason Farm and Daniels Road, across the street from the parking deck used by hospital patients. Transportation is provided for hospital in-patients; out-patient parking is available next to the MRI building.

"Our facility is exceptional because of the pains we've taken to make it warm and attractive to patients," Staab said. "There's plenty of room for patients—5,000 square feet of clinical space. We definitely kept the patients in mind when we designed it."

Research also will be an important component of the work that goes on at the MRI facility.

"We think we're just scratching the surface," Staab said of the potential MRI applications. "We're excited about developing this imaging technology."

Dean Bondurant explains the image of the brain to Clint Newton, center, chairman of the UNC-Chapel Hill Board of Trustees, and Phillip J. Kirk, Jr., secretary of the N.C. Department of Human Resources, during a tour of the new Magnetic Resonance Imaging facility.

Researchers Elected to Elite Group

Four School of Medicine researchers have been chosen to join the nation's premier organization for scientific investigation in internal medicine.

Elected to the prestigious American Society for Clinical Investigation at its annual meeting in Washington, D.C., are UNC-CH associate professors of medicine Drs. Philip L. Cohen, H. Shelton Earp III, M.D. '70, Robert A. Eisenberg, and Gilbert White, M.D. '71.

The four men are among 80 distinguished medical researchers who became members this year out of a total of 269 nominees, nine of whom were from North Carolina.

Established in 1907, the American Society for Clinical Investigation seeks to advance scientific investigation among practicing physicians, ages 45 and under. Membership is awarded by a committee on the basis of original, significant and independent research that is related to the treatment of human diseases.

"Our four professors richly deserve this honor because they have each added important and useful knowledge about disease to clinical science," said Dr. Stuart Bondurant, dean of the School of Medicine and an ASCI member emeritus.

Cohen, a microbiologist and immunologist, has been credited with identifying certain cells and genes in mice that appear to be critical in the development of systemic lupus, an arthritic disease that usually affects young women.

His work also has focused on understanding how abnormal antibodies that destroy normal tissues are produced in people with arthritic diseases.

Earp, who became associate director of UNC's Lineberger Cancer Research Center in 1982, is an endocrinologist whose work has helped explain how hormones and growth factors regulate growth in living cells. Most of his studies have provided new information on the mechanism by which rats regenerate their livers and develop liver cancer.

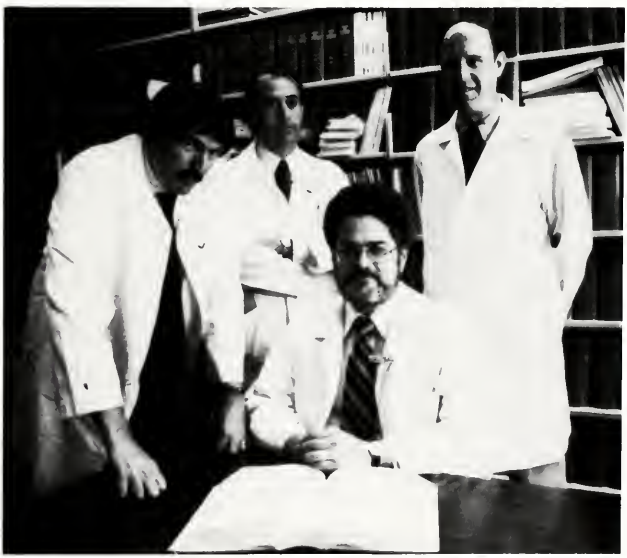
Earp earned his medical degree and a master's in biochemistry from UNC.

Eisenberg, a member of the faculty since 1978, is a microbiologist and immunologist who is noted for his work in understanding how abnormal antibodies are produced in arthritic diseases. His main achievements involve characterizing the antibodies and cellular interactions associated with those diseases.

Like Cohen, with whom he has collaborated, Eisenberg has been chosen as a senior investigator for the Arthritis Foundation and has received numerous other research awards and grants.

White is nationally recognized for his contributions in the field of bleeding and clotting disorders. He has played a leading role in exploring the biochemical events that regulate blood clotting, with emphasis on how calcium activates cells involved in clotting.

A native of Durham, White completed his undergraduate, graduate and medical training at UNC.



Left to right, Drs. Shelton Earp, Robert Eisenberg, Philip Cohen and Gilbert White.

Carolina Consultation Center

Among the recommendations of the 1983 Alumni Development Task Force chaired by Dick Boyd, M.D. '56, was improvement of communications between the school and its alumni. One aspect of this call for better communication involved a plea for the medical center at Chapel Hill to pay more attention to the needs of physicians throughout the state who either refer patients here, or who would like to send patients to the medical center.

From this impetus grew the notion of building a special center dedicated to making it easy for doctors outside the medical center to connect with the attending medical staff of North Carolina Memorial Hospital. And, conversely, this center should be useful in helping medical school doctors return calls to their colleagues in practice throughout the state in an efficient and timely way.

That idea of the Medical Alumni Development Task Force became a reality here in Chapel Hill, July 1.

Medical Director Harold C. Pillsbury III, professor of surgery and chief of ENT, reports that initially, the center is operating from 7 a.m. to 9 p.m. weekdays. "Its staff consists of specially trained information specialists whose sole duties are facilitating professional access to attending physicians and medical center services." The service may be accessed through a special 800 number (1-800-UNC-NCMH).

John Stokes, director of institutional relations, has announced the appointment of Andree Woosley as director of the new programs.

Woosley, has worked with the public affairs staff at North Carolina Memorial Hospital since 1984.

Stokes added: "What we are attempting to do has been done elsewhere—most notably at Alabama and Mayo. Still, it is a tremendously complex undertaking.

"While we hope you will be understanding if we experience growing pains, at the same time we hope you will be forthcoming and explicit with constructive criticism as we work to implement this mechanism for improved communication."

Now You Can Call The Carolina Consultation Center For Rapid Access To Top Specialists And Advanced Clinical Information.

The Carolina Consultation Center at North Carolina Memorial Hospital in Chapel Hill is a major commitment to physicians of our state and region. With rapid response as the primary concern, it gives doctors in practice immediate access to the knowledge and services of our academic medical center. We are genuinely pleased to offer this kind of service to you, and we are confident that it will be of significant value in your practice.

Harold C. Pillsbury III, M.D.
Chief, Division of Otolaryngology and Medical Director, Carolina Consultation Center
North Carolina Memorial Hospital
University of North Carolina at Chapel Hill

The Entire Staff Of The UNC Scho

The Carolina Consultation Center is a doctors-only communication system for the practicing physician staffed by specially trained personnel with a single job: to connect you with the consultant of your choice.

Immediacy Is The Key

The University of North Carolina and North Carolina Memorial Hospital represent an invaluable resource to physicians throughout the region. Now, through the Carolina Consultation Center, you can take full advantage of the information and services for which these institutions are known. You can cut through the red tape and make timely contact with the right person. Whether you seek information, support, or a contact to assist you in transferring a patient, the Center makes it happen *fast.*

A Direct Link

As a public institution, North Carolina Memorial Hospital has a statutory as well as professional responsibility to make its resources available to doctors throughout the state. The Center is the practicing physician's direct link with these resources, and thus offers a variety of vital benefits:

Access to Information: The Carolina Consultation Center gives community practitioners access to highly specialized information. It also creates a prompt, professional context for handling requests for suppo

Clinical Consultation: The medical staff of North Carolina Memorial Hospital, which is also the faculty of th UNC School of Medicine, includes specialists in virtually all fields of practice Through the Center, physicians have a direct line to these experts, who provide information and support in your management of complex cases.

Tertiary Hospital Services: The Center can be of particular help when you are arranging for services provided by our facility. You will be connected promptly t the right person, whether it b

Of Medicine Is On Call.

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How It Works

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A special directory provides
up-to-date listing of the
edical staff, their
ckgrounds, and their areas
expertise. This directory,
available to all area physicians at no cost, helps you find the right consultant for your purpose.

Equally important is the Consultant Masterfile, a computerized registry of the entire North Carolina Memorial Hospital medical staff. It assists our staff in locating your consultant wherever he or she may be. Individual office, clinic and teaching schedules are included in this file, as are telephone and pager numbers, call lists, meeting schedules, and any other data which might be of value.

Your Center operator remains on the line until contact is made. In the rare event that all avenues are exhausted without success, operators will suggest appropriate alternatives or get back to you with an answer *within 15 minutes.*

The Carolina Consultation Center is in operation weekdays from 7 AM to 9 PM. Just dial 1-800-862-6264 (1-800-UNC-NCMH). The resources are here. The commitment is strong. The mechanism is in place. All you need to do is make the call.

1-800-UNC-NCMH

The Directory Of Consultants

A critical tool in this new, fast access information system is the *Directory of Consultants.* It provides an informative overview of the North Carolina Memorial Hospital medical staff, listing each member by department, division, and specialty. Professional biographies provide information about training, certification, and special interests. Also included are direct line phone numbers and mailing addresses.

In short, the Directory contains all the information you will need to direct you to the physician consultant who can be of the greatest assistance to you. By having this material at your fingertips and making your choice before placing your call, you enable the Carolina Consultation Center to do what it was designed to do: put your call through without delay.

To receive your free copy of the Directory of Consultants, simply write or call the Carolina Consultation Center today.

Carolina Consultation Center
North Carolina Memorial Hospital

Carolina Consultation Center
Division of Institutional Relations
North Carolina Memorial Hospital
Chapel Hill, North Carolina 27514

Cardiovascular Disease

Dr. George Johnson

Surgeons who treat cardiovascular disease must prepare to meet the increasing needs of the aging Americans who suffer most from it, says a surgeon at the School of Medicine.

"The population over 65 will increase 34 percent by the year 2010, while the total population will increase only 19 percent," says Dr. George Johnson Jr. "This suggests an increased need to manage the diseases of the aged in the first part of the 21st century."

Johnson, a professor of surgery who specializes in diseases of the circulatory system, made his remarks recently as part of his presidential address to the 25th Annual Meeting of the North American Chapter of the International Society for Cardiovascular Surgery, held in New Orleans. Johnson has served as president of the prestigious international group during the past year.

The aging population brings with it increased risk of stroke, aortic aneurysm, and circulation problems caused by smoking and diabetes.

"Improved treatment and medication mean that adults with diabetes live longer lives, but they often must face serious peripheral vascular problems as they grow older," Johnson says.

He views the role of the vascular surgeon as unique among medical specialties.

"There are no medical specialists comparable for the diseases we are responsible for treating. We have an awesome responsibility to the public to recommend both prevention and the best treatment for the diseases we encounter."

One of the treatments frequently recommended by vascular surgeons is a carotid endarterectomy, a procedure that clears blocked arteries to improve the flow of blood to the brain and to prevent strokes. Surgeons have come under fire recently for allegedly performing too many endarterectomies.

This criticism "cannot be ignored. Neither can it be addressed immediately," Johnson says. He notes that several studies are under way to find out how effective the procedure is, and when it is indicated for patients.

Johnson describes himself as a second-generation cardiovascular surgeon, one of a group poised between the pioneering accomplishments of the past 30 years and the potential break-throughs that await the up-and-coming generation of surgeons and researchers.

"The 'baby boom' of the 1950s is aging. It will produce a large, if temporary, bulge in the aged population—the patients for the third-generation vascular surgeon."

Johnson is one of only seven approved vascular surgeons in North Carolina; there are only 620 of those surgeons in the country.

One of his goals is to improve the training of general surgeons who do vascular surgery. He also would like to see improved standards in the accreditation and certification process for vascular surgery residency programs.

He foresees a bright future for vascular surgery, especially in research.

"I predict that because of the third-generation vascular surgeons, an accomplishment in vascular surgery will be listed among the top 10 in surgery in the next 10 years."

Symposium Honored John Graham

Dr. John Graham, wife Ruby, Dean Bondurant and Dr. William Huffines attend the morning lecture.

Internationally known scientific experts participated in a day-long symposium last spring as part of a tribute to Dr. John B. Graham for his 39 years of distinguished service to the School of Medicine.

Dr. Graham, Alumni Distinguished professor of pathology, retired June 30. During his career, he has made major contributions in teaching and science including the founding and development of the genetics curriculum of the UNC-CH School of Medicine.

He is an internationally recognized expert in blood coagulation, genetics and human population dynamics.

The Clinical Coagulation Laboratory of the North Carolina Memorial Hospital was named in honor of Dr. Graham.

A native of Goldsboro, Dr. Graham earned his Certificate of Medicine at UNC in 1940 and received his medical degree from Cornell in 1946.

Drs. John Graham (left) and William McLendon.

Markle Scholars,left to right, **Drs. Judson Van Wick, Walter Hollander, John Graham, Isaac Taylor, and George Peanick. Symposium honored John Graham.**

Faculty Notes

Dr. Stuart Bondurant, dean of the School of Medicine, received the Alfred E. Stengel Award of the American College of Physicians (ACP).

Bondurant was presented a bronze medal which recognizes senior members of the College for contributions to "...furtherance of the purposes of the American College of Physicians through education and public service."

The American College of Physicians is a national specialty group for internal medicine physicians. With 56,000 members, it is the largest organization of its kind in the world.

In addition, Bondurant gave the presidential address at the 100th anniversary convocation of the Association of American Physicians in Washington, D.C.

Dr. Harold C. Pillsbury III

Dr. Raymond P. White, Jr.

Dr. Harold C. Pillsbury III, surgery, received the Harris Mosher Award, the highest award given in the field of otolaryngology. Pillsbury's award-winning thesis links noise, diet and hypertension with hearing loss in older adults.

The Alumni Association of Virginia Commonwealth University has named **Dr. Raymond P. White Jr.** Outstanding Alumnus for 1986. He is associate dean of the School of Medicine.

Researchers Receive Biotechnology Awards

Seventeen researchers in the School of Medicine received over $240,000 to support research in various areas of biotechnology.

The recipients are Drs. **Jane C. Azizkhan, Ronald Swanstrom, John P. Manfredi, Eng-Shang Huang,** Lineberger Cancer Research Center; Drs. **Edward W. Homes, M. Lynn Smiley, Katherine A. High,** medicine; Dr. **Jan Hermans,** biochemistry; Dr. **Susan Lord,** pathology; Dr. **Philip Carl,** pharmacology and Dr. **Stephen H. Clarke,** microbiology and immunology.

The projects cover a broad range of biotechnology research areas including bioelectronics, genetics, immunology and marine biotechnology.

Space Motion Sickness

"To Paul with thanks for helping establish the first vertigo 'lab' in space."
—W. Thornton, M.D.

That inscription appears on a picture of the space shuttle Challenger on the wall of Dr. W. Paul Biggers' office. It refers to the work Biggers M.D. '63, an otolaryngologist at the School of Medicine, has done with space motion sickness.

Just what is space motion sickness, and why is an ear, nose and throat doctor studying it?

"Space motion sickness is part of the space adaptation syndrome experienced by some astronauts in space. Its symptoms are similar to the motion sickness that some of us experience on Earth: nausea, anorexia, disorientation. Oddly enough, people who are most susceptible to motion sickness often are *not* susceptible to space motion sickness," Biggers says.

And, since it is frequently the fluid shifts in our inner ears that control balance, it's logical for an ear, nose and throat doctor to be involved in SMS research.

But there's another reason Biggers is involved. A fellow classmate at the UNC School of Medicine became the first UNC physician—and oldest astronaut—in space: Dr. William Thornton.

Thornton called Biggers when he realized that space motion sickness was a problem for astronauts. The two have been devising new means to test the body's responses to space ever since.

"It appears to Dr. Thornton and me that this isn't going to be a real serious obstacle to man's exploration of space. Medical control is possible, and the symptoms are not real severe. And, as one spends more time in space, there is some adaptation."

But what causes astronauts to feel ill once orbit has been established, then get well between two and four days later? No one really knows.

"Our balance organs are used to functioning in 1-G gravity; some don't function as well in the near-zero gravity of space, and some portions of the inner ear don't function in the same way as they do on Earth. But we haven't been able to duplicate on Earth the same conditions that would result in SMS."

Two theories have been raised. The first is sensory conflict.

"When you see yourself in one orientation and your brain is being told you're in another and your joints are telling you you're in still another, that sets up sensory conflict. Such conflict can make you nauseous; it's not unlike seeing a 3-D version of a roller coaster. You're constantly adjusting to stimuli that aren't there."

The second theory is called hydrops, and refers to the relocation or accumulation of fluid in the body, including in balance organs such as the inner ear. Biggers and Thornton have been unable to document any fluid changes in the inner ear, but up to a liter of extracellular fluid does relocate above an astronaut's waist, causing the hands and face to get puffy.

Biggers presented the results of studies of 28 shuttle astronauts to the annual general meeting of the Otolaryngological Society of Australia. The analysis of those results shows that the inner ear and brain stem are working fine. The gastrointestinal tract doesn't always work so well, but that probably has little to do with SMS.

So, we know more about what doesn't cause SMS; what does?

Biggers believes it may have to do with the diminished stimuli and the unloading of the macular organs which depend in part on gravity to operate.

Thornton has not limited his research to SMS. There are ongoing studies about the complete adaptation of various organ systems.

"It is critical that we pursue this," Biggers says. "For example, we need to measure and continue to study cardiovascular function and changes in the musculoskeletal system in space. I've been very impressed with Dr. Thornton and his ability to invent devices to measure body functions in space."

Biggers noted that some of Thornton's inventions have practical applications, too. One is a small audiometer that measures inner-ear function.

"That's directly transferrable to the newborn nursery, where it's critical to pick up hearing problems as early as possible."

Funds Needed to Restore Shaw Art Collection

Ruth Faison Shaw Collection

A fund-raising project is under way in Chapel Hill to raise money to restore some 200 pieces of the Ruth Faison Shaw finger painting collection at the University.

The Carolina Fund and the Ruth Faison Shaw Memorial Committee began the drive in May for the restoration of the paintings that were given to the UNC-CH library in 1972 by Shaw's heirs.

Martha Whittingill, who chairs the memorial committee, said Shaw was the "first person to make finger paints anywhere in our century" and was a pioneer of using finger painting as art therapy. She used the form of art as a means of self-expression for young and old and as therapy for mentally disturbed patients.

Shaw was teaching children in Italy in the 1930s when a young prince cut a finger and went to put iodine on it. The youth then began smearing the bathroom wall with the iodine on his hand.

When Shaw saw his work, she conceived the idea of the harmless medium of finger painting. She created a non-toxic paint that children could use safely, then joined her class in painting "The Open Door," the first modern day finger painting.

In 1956, Shaw returned to North Carolina as a consultant to the Department of Psychiatry at UNC.

Many of the paintings are still in their original frames. The project will include restoring, rematting and protecting works that have deteriorated from age and storage.

To contribute to the restoration effort, send checks payable to the Carolina Fund and designated for the Ruth Faison Shaw Collection, 600 NCNB Plaza 322A, Chapel Hill, N.C. 27514.

Class notes

Manning-Berryhill Club

G. Walker Blair, M.D., '45, is still practicing medicine in Burlington. He and wife, Sara Jo, have three children—George, Barnett and Sara. When not too busy, this family enjoys traveling.

J. Seaborn Blair, M.D., '45, is an associate clinical professor in family medicine at Duke and East Carolina Universities. At ECU, Blair teaches first-year medical students in family practice. He and wife, Elizabeth, have three children—Elizabeth, Seaborn and Mott—who are all physicians-in-training. Elizabeth will graduate from ECU in 1988. Seaborn III and Mott will graduate in 1987. Even with his busy schedule, Blair Sr. finds time to enjoy boating, fishing and scuba diving.

George R. Clutts, M.D., '45, lives in Greensboro. He and wife, Sue, have two sons and a daughter. The family enjoys tennis, boating, sailing and "observation farming."

Cameron S. McRae, M.D., '33, is retired and lives in Richmond, VA. He keeps busy by auditing classes at Virginia Commonwealth University.

Samuel A. Pope, M.D., '33, is retired from his practice in internal medicine, but he still resides in Beulahville.

Hubert C. Patterson, M.D., '35, is living in Chapel Hill. He reports that he and his wife "seem to have less spare time than when we weren't retired."

William H. Davis, M.D., '39, is in retirement in Seal Beach, CA. He is active in The Alliance for the Mentally Ill, an organization which provides family support for mentally ill persons.

50s

Everette James, M.D., '59, is living in Nashville, TN, where he is active in the Vietnam Veterans' Leadership Program. He was recently rewarded for his contributions to the VVLP with a bronze replica of the Tennessee Monument. James was awarded the Army and Air Force Commendation Medals and was nominated for the Bronze Star with citation for valor for his efforts in the Vietnam War.

Martha Sharpless, M.D., '59, is in her third year as professor of pediatrics with the UNC-CH School of Medicine. She is a consulting physician for the Developmental Evaluation Center at Moses H. Cone Hospital in Greensboro and a medical examiner for the Guilford County division of child abuse and neglect. She is also a consultant for Project REACH, for pre-school-aged children with emotional problems. Sharpless and her husband, Edward, have four children—Lisa, Alice, Kelly and Ned—all of whom are in college or professional school.

60s

George Hemingway, M.D., '63, is living in Tarboro, where he has practiced internal medicine and pediatrics since 1970. Hemingway is currently chief of the medical staff and medical director of the cardiopulmonary lab at Edgecomb General Hospital.

John R. Curtis, M.D., '60 lives in Athens, GA, where he is director of the health service at the University of Georgia. He and wife, Joan, have three children—Russell, Elizabeth and Mary. He plans to go into private practice and take over the directorship of Charter Winds, a private psychiatric hospital in the Athens area. Curtis was named the Psychiatrist of the Year by the Georgia Psychiatric Association.

John R. Dykers, M.D., '60, is in family practice in Siler City. He and wife, Carol, have three children—Dorothy Anne, John R. III, and Thomas Andrew. Dykers enjoys raising purebred Charolais and processing New Hope Farm low-cholesterol beef at his own meat-packing plant.

Gerald W. Fernald, M.D., '60, lives in Chapel Hill with his wife, Anne. They have three children—Mark (28), Susan (25), and Peter (20). Fernald is currently professor and associate chair of the department of pediatrics at UNC. He is also director of the cystic fibrosis center.

Carwyle LeRoy, M.D., '60, resides in Charleston, SC, where he is a professor of medicine at the Medical University of South Carolina. He spends much time in arthritis research. LeRoy and wife, Dee, have two children—DeFord (22), and Carwyle Jr. (20), who is a UNC sophomore.

J. Gray McAllister III, M.D., '60, is medical director of Lee-Harnett Medical Health Center in Buies Creek. He also does a small amount of private practice work in Chapel Hill, where he lives. McAllister has three children—Macon, (24), Gray IV (21), and John (17). In his spare time, he enjoys watching the Tar Heels play basketball.

Duncan S. Owen, Jr., M.D., '60, is a professor of medicine at the Medical College of Virginia in the division of immunology (connective tissue diseases). He not only teaches, but does research, private practice, and administrative work as well. Owen and wife, Irene, have three children—Duncan III (17), Robert (13), and Frances (11). Owen enjoys living in Virginia, but says he is "still an avid Tar Heel fan."

Robert B. Payne, M.D., '60, is currently practicing internal medicine with 13 other internists in Charlotte. He is immediate past president of the Mecklenberg County Medical Society, and is medical director of Carolina Medical Care, a newly formed physicians' health and medical organization. He and wife, Peggy, have two children—Holly (23) and Benjamin (4).

Elliott Solomon, M.D., '60, is practicing facial plastic surgery in New York. He is also a senior aviation medical examiner. Solomon and wife, Susan, have three children—Scott, Beth and Nancy.

William H. Morris Jr., M.D., '60, resides in Munster, IN. He is currently in private practice in general pediatrics in a large multi-specialty clinic. Morris and wife, Margaret, have three children—Beth, Hal and Bob. Morris enjoys watching the Chicago Bulls "with Michael Jordan," and traveling around the country to see his son, Hal, play baseball for the University of Michigan.

70s

Daniel L. Crocker, M.D., '70, is an internist with a specialty in hematology and oncology. He lives in Rocky Mount with wife, Brenda Sue, and their two children—Sue Ellen and Natalie.

William H. Katz, M.D., '74, is in solo ob-gyn practice in Auburn, ME. He and wife, Joan, have two children—Sarah and Matthew. Katz says, "The family and I recently took a trip to Hong Kong and Japan. Japan is wonderful but very expensive."

V. O. Roberson III, M.D. '71, was named chairman of the department of anesthesiology at High Point Memorial Hospital in 1985. Roberson is also past president of the North Carolina State Anesthetists' Society and is an alternate delegate to the American Society of Anesthesiology. He is also vice president of Medical Software Specialties, a computer firm for medical office software.

Marshall H. Odom, M.D., '75, is director of emergency services at Good Samaritan Hospital, a 700-bed teaching hospital in Cincinnati, OH. He is also director of emergency services at Deerborn Hospital in Lawrenceburg, IN and is a clinical instructor in emergency medicine at the University of Cincinnati College of Medicine.

McKay McKinnon, M.D., '76, resides in Chicago, where he is an assistant professor of plastic surgery at the University of Chicago. He is married and has one daughter, Kelsey, 2.

Theodore "Ted" F. Hoffman, M.D., '78, was appointed to the Durham County General Hospital medical staff. His clinical specialty is anesthesiology.

Thomas Lee Speros, M.D., '76, is in private practice in Washington, NC. He was recently elected to the board of directors at the Eastern Area Health Education Center and to the board of deacons at the First Presbyterian Church in Washington. He and wife, Leslie, have a 1½ year-old daughter, Lindsay Katherine.

Richard Bowerman, M.D., '76, is still an attending psychologist at the University of Michigan at Ann Arbor. He says "My wife, Cathy, is working for a downtown Detroit law firm, where she is still defending doctors!" Bowerman and his wife have a 1½ year-old daughter, Ashley, who Bowerman says, "weighed eight pounds and three ounces and was twenty and a half inches long when she was born. That's a respectable jump shot!"

Hubert H. Thomason, Jr., M.D., '79, is living in Denver, CO. He and wife, Laura, welcomed a new arrival last March 3. Thomason says, "Lesley Hiram Thomason was born saying 'I just wanna play de blues!"

Robert Campbell, M.D., '75, is still living in Richmond. He has been reappointed as the anesthesiologist section editor for the Journal of Oral and Maxillo Facial Surgery and has also been named editor for the Newsletter of the American Dental Society and Anesthesiology.

John R. Lurain, M.D., '72, has been appointed as head of the section of gynecological oncology in the department of obstetrics and gynecology at Northwestern University Medical School.

Ken Steinwieg, M.D., '75, is chief of the department of family practice at Tripler Army Medical Center in Honolulu. He and wife, Sue, have two children - Emily (6) and Megan (2). Steinwieg says that his hobbies are "watching my children grow and running."

Jeffery A. Buckwalter, M.D., '79, is in practice in Doylestown, PA. He is a member of an otolaryngology practice. He says, "Although things have gone well so far, the transition from a busy academic medical center to a small community-hospital-based atmosphere has been a dramatic one. We are presently enjoying town-and-country atmosphere which is ideal for our young family." Buckwalter and wife, Mary Jo, have two children - Shelby and Jeffery Allen Jr.

'80s

Wallace K. Dyer, M.D., '80, has opened his private practice in facial plastic and reconstructive surgery in Atlanta, GA. He is also a clinical professor in the department of otolaryngology at Emory University. In October, 1985, Dyer received his diploma from the American Academy of Facial Plastic and Reconstructive Surgery with the completion of his fellowship training in facial plastic surgery in Birmingham, Alabama. Dyer is one of 163 physicians in the United States to be granted this distinction.

Charles B. Nemeroff, M.D., '81, associate professor in the department of psychiatry at Duke University Medical Center, received the Curt R. Richter Award at the annual meeting of the International Society of Psychoneuroendocrinology in May, 1985.

Jerry W. Withrow, M.D., '80, has gone into practice with his brother, Glenn A. Withrow ('82), in Chapel Hill. They call their practice "The Family Doctor." It is "a concept which will combine the traditional family practice with an immediate care walk-in facility."

Donald C. Whiteside, M.D., '80, is practicing obstetrics and gynecology in Charlotte. He and wife, Anne, have two children - Scott (3) and Katie (2).

Peter J. Holland, M.D., '81, and Donna Holland, M.D., '82, are practicing psychiatry in Del Ray Beach, FL. They have two children - Aaron (3½) and Arielle (11 months).

Douglas S. Kernodle, M.D., '81, is a fellow in infectious disease at Vanderbilt University Medical Center. He was awarded the National Foundation for Infectious Diseases/Beecham Laboratories Fellowship in nosocomial infection research for 1985-86.

Stanley Hamaker, M.D. '82, has joined David Hopper, M.D. (UNC graduate, 1979) and two other physicians in group family practice in Princeton, WV. He and his wife have two children - Sarah (2) and Daniel (5), "who continues to be full of fun and foolishness."

When Jan Kovach, M.D. '81 heard about a trip being planned to visit Tanzania to learn how Americans could help fight against drought, hunger and poverty, she got excited.

She was one of three North Carolina residents who traveled to Tanzania in 1985 to learn how Americans can help the country.

Dr. Kovach is a 1981 graduate of the University of North Carolina School of Medicine. She is shown with Dr. Swai, administrator of the Bariadi District Hospital in Tanzania. It is the only government hospital for the 300,000 residents.

Terry W. Wallace, M.D., '82, was named chief resident for diagnostic radiology for the 1985-86 academic year at the State University of New York at Stony Brook.

Petrie M. Rainey, M.D., '80, has accepted a position as assistant professor in laboratory medicine at Yale University.

Paul B. DuVall, M.D., '80, is in family practice in Brevard. He and wife, Teresa, have one child, Laura Brandon (1).

George D. Zoret, M.D., '81, is urgent care director at Coliseum Park Hospital in Macon, GA. He is also president of Zoret Manufacturing, Inc., which manufactures custom sailing vessels.

Douglas K. Holmes, M.D., '80, completed his residency in otolaryngology and is serving four years in the U.S. Air Force in Elmendorf Air Force Base, Anchorage, Alaska.

Jan C. Buckner, M.D., '80, is a consultant in medical oncology at the Mayo Clinic. She has a two-year-old daughter and plans to settle permanently in Rochester, MN.

Thomas S. Kawzynski, M.D., '81, has joined the Toe Valley Medical Associates (internal medicine) in Burnsville, NC, after a stint in Michigan. He and his wife, Lynda, have a one-year-old son, Andrew Kinnae.

David W. McCurry, M.D., '82, and his wife welcomed a son, Avery Sevier, in 1985. "Avery arrived May 31 at 11:19 p.m. in time for his dad, just entering practice in Concord, N.C."

Deaths

Donald H. Leeper, C. Med. '36
Carlos J. Ross, C. Med. '43
Alton B. Goldston, C. Med. '27

Lost Alumni

Listed below are a number of alumni who need to be located. Addresses need to be forwarded to the Medical Alumni Office, 231 MacNider, 202H, Chapel Hill, N.C. 27514.

1927
Olin C. Hendrix

1928
Edgar N. Boseman

1943-December
Frank P. Smith

1946
George J. Nassef

1968
Michael D. Lutz

1972
Michael J. Kirby

1973
Marshall F. Goldberg

1974
Forest P. Newman, III
Charles W. Smith, Jr.
M. Lee Wallace, Jr.

1975
Clarence E. Fogleman, III
Michael W. Meriwether
Geraldine N. Wu

1976
Tamara S. Beecham
Richard T. Fritz

1977
Sandra H. Griffin
Peter C. Gruenberg
Ruth C. Penn

1978
Victor F. Dickens
Alfred L. Harkley
William D. Snider
John P. Williams

1979
Gail M. Capel
Shirley Davis David
David L. Gaston, Jr.

1980
Tonya C. Claytor
Calvin McNeill
Douglas G. Wysham

1981
Thomas H. McCoy
James E. Richardson
Leslie E. Waters

1982
Robert Arasi
Martha W. Hahn
Tommy R. Harris
Dean A. Madar
Gregory E. Simon
Stephanie B. Strauss

1983
Sally L. Carpenter
Henry E. Holloway, Jr.
Jocelyn M. Pyles
Junius H. Rose, III
David L. Sultzer
William S. Wood, Jr.

1984
Don A. Bell
Ashok Chopra
Rebecca S. Socolar
David E. Sorenson
Gregory T. Teel
Joan E. Wynn

Calendar

Medical alumni activities

December		
5	Whitehead Society Annual Student-Faculty-Alumni Holiday Party	Chapel Hill
April		
3-4	Spring Alumni Meeting	Chapel Hill

Continuing education

December		
3-5	How to Stimulate Team Effectiveness in Medical Schools and Teaching Hospitals	Chapel Hill
6	Diarrhea: Diagnosis, Management and Prevention	Chapel Hill
January		
23-24	Hypnosis in Clinical Practice: The Mind-Body Connection	Chapel Hill

For more information about alumni activities, contact Beverly Stutts at 962-2118. Contact Nancy Barnes at the same number for information about continuing education programs, or write the Office of Continuing Medical Education, 231 MacNider 202H, Chapel Hill, N.C. 27514.

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